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STUDIES IN AFRICAN LINGUISTIC CLASSIFICATION: III. THE POSITION OF BANTU

JOSEPH H. GREENBERG

IN THE FIRST ARTICLE of the present series, the position to be assigned to the Bantu languages within the vast Niger-Congo family was indicated without the presentation of detailed proofs or the refutation of arguments that might be presented in favor of the traditional view.

As has already been seen, the great mass of languages in the western Sudan were demonstrated by Westermann to be genetically related and to this group he applied the name West Sudanic. In the first article of this series I attempted to show that many languages farther east in the Sudan, though by no means all of them, belonged to this 'West Sudanic' family; for this entire stock I proposed the designation Niger-Congo.

Westermann, who, it is worth remarking, is an eminently cautious investigator, pointed out many resemblances in fundamental vocabulary between the Proto-West Sudanic forms he had reconstructed and the Proto-Bantu forms postulated by Meinhof.[1] This material, which might be vastly extended, showed regular correspondences such as the following: Proto-Bantu *v = Proto-Sudanic *b, Proto-Bantu *γ = Proto-Sudanic *g; in the vowel system Proto-Bantu *î, *i, *e, *a, *o, *u, *û corresponded respectively with Proto-Sudanic *i, *i, *e, *a, *ua, *u, *u.[2] Occasionally Proto-Bantu *u* corresponds to Proto-West Sudanic *i*. Moreover the noun classifying affixes of West Sudanic, which appear as prefixes in some languages, suffixes in others, and as both prefixes and suffixes in still

1 D. Westermann, *Die westlichen Sudansprachen und ihre Beziehungen zum Bantu* (Berlin, 1927), especially pp. 310-313.

2 Proto-Bantu forms are quoted throughout in the transcription employed by Meinhof. û and î stand for very close back and front vowels respectively.

others, showed close resemblances to the well-known prefixes of Bantu both in form and meaning, thus:

PWS	*PB*	*Meaning*
u	ɣu[3]	Singular, personal class and animate non-personal class
ba	ʋa	plural, personal class
i	ɣi[3]	plural, animate non-personal class
li	li	singular of paired objects
a	ɣa[3]	plural of paired objects
ma	ma	liquids and other mass nouns
bu	ʋu	abstract
ki	ki	plants, objects
ku	ku	infinitive, locative
ka	ka	diminutive singular
ti	tu	plural of diminutives.

I list here the English equivalents of a selection of morphemes for which cognate forms may be found in Bantu and West Sudanic. A full listing, with forms from the relevant languages is not attempted for reasons of space. It would easily fill this entire issue!

head, ear, mouth, tongue, jaw, arm, hand, leg, knee, breast, belly, back, tail, skin, bone, saliva, excrements, mother, father, sun, stone, wind, water, blood, fat, charcoal, animal, leopard, fowl, egg, dog, bird, goat, fly, crab, tree, two, three, four, inside, not, I, he, we, you, they, be, go, send, speak, eat, drink, sleep, die, laugh, call, steal, break, defecate, sit, bad, soft, large, black.

In order not to duplicate material already available, the reader is referred to the above-mentioned study of Westermann.[4] Likewise a number of Proto-Bantu forms are incidentally cited in the latter section of the first article of this series. Some idea of the extent of these resemblances may be gathered from the following. They are more numerous than for many of the languages already accepted as West Sudanic and the case is somewhat better than for the affiliation of English to Indo-European. Thus, of 50 nouns, taken at random from Johnston's study of Bantu, 21 were referable without trouble to Proto-West Sudanic. Of these same 50 nouns in English only 17 could be traced to Proto-Indo-European. Of these

3 Here again, I quote Meinhof's reconstructions; *u*, *i* and *a* respectively in place of *ɣu*, *ɣi*, *ɣa*, seems more likely.

4 See Note 1 above.

same 50 nouns in Dyula, a typical Mandingo dialect which has always been reckoned as West Sudanic, only 11 could be shown to be derived from Proto-West Sudanic.

If we may, on the basis of this evidence, admit that the Bantu and West Sudanic (i.e. Niger-Congo) languages are related, the question arises regarding how this relationship is to be conceived. One alternative is to regard Bantu as coördinate genetically with West Sudanic (i.e. Niger-Congo) as a whole. In view of the size of the Bantu group and the independent position accorded to it in every previous classification of African languages, this was my assumption during the earlier phases of the investigation. However, another possibility soon forced itself on my notice, namely, that the Bantu languages are simply a subgroup of an already established genetic subfamily of West Sudanic.

For this to be true, there must exist a subfamily of West Sudanic which shares common linguistic innovations not found elsewhere among West Sudanic languages. There is such a group of languages, those called Benue-Cross by Westermann and Semi-Bantu by other writers.[5] An example of an innovation of the type referred is the word for 'child'. The Proto-West Sudanic form is **vi* and it is found virtually everywhere outside of the Benue-Cross group. These languages, along with Bantu, show a form **ana* which is evidently an innovation dating a period of common historical development in which both Semi-Bantu and Bantu languages shared. Many other such innovations could be cited. Their sum total is so great that, as will be seen later, several Bantu languages, about which only very limited information existed, have been classified as Bantu while other observers have on occasion classified the same language as Bantu or Semi-Bantu. Of the 50 Bantu nouns discussed above, 43 are found commonly in Semi-Bantu languages, while for the same 50 in English, only 39 are traceable to Primitive Germanic.

The position of the Semi-Bantu languages has always been a paradoxical one. They have been considered, with every right, as a subdivision of West Sudanic yet they show a resemblance to Bantu which is so close as to earn them the name Semi-Bantu. If Bantu and West Sudanic are really distinct, such a group of languages should not exist! But we have seen, that apart from any consideration of the Semi-Bantu group, there is sufficient evidence that Bantu is in some manner related to West Sudanic. The denial of the relationship between the Bantu and Semi-Bantu languages, which is almost comparable to deny the genetic relation-

5 Some writers, e.g. Johnston, have extended the term Semi-Bantu to all West Sudanic languages with noun prefixes, thus including languages as far west as the Atlantic. This usage is not referred to here.

ship of British and American English, is the *reductio ad absurdum* of the conventional assumption of the independent status of Bantu.

The only alternative explanation, and one must suppose that this has been more or less tacitly accepted up to now, is that the Semi-Bantu languages owe their special resemblance to the Bantu languages through borrowing, and that the resemblance between West Sudanic and Bantu is likewise the result of borrowing from Bantu. This explanation seems to be precluded for the following reasons.

1. *The nature of the phonetic correspondences.* For the bulk of the Semi-Bantu languages we have nothing beyond word lists. In the case of Efik, however, one of the languages of the Cross River group, we have I. C. Ward's excellent tonal study.[6] Unfortunately relatively few forms are cited in this work, but among them are fifteen words for which Proto-Bantu tonal data have been deduced.[7] The result, as can be seen from the following citations, is virtual tonal identity. Noun prefixes are omitted. Efik *-tó,* Bantu **-té* 'tree'; Efik *-tóŋ,* Bantu **-tó* 'ear'; Efik *-kút,* Bantu **-kúdù* 'tortoise'; Efik *-kpè,* Bantu **-gwè* 'leopard'; Efik *-buá,* Bantu **-bwá* 'dog'; Efik *-nuèn,* Bantu **-nòní* 'bird'; Efik *-bà,* Bantu **-bàlè* 'two'; Efik *-tá,* Bantu **-tátù* 'three'; Efik-*nàŋ,* Bantu **nài* 'four'; Efik *-tiôn,* Bantu **-tánò* 'five'; Efik *dì,* Bantu *lè* 'to be'; Efik *kpá,* Bantu *kuá* 'to die'; Efik *tè,* Bantu *tè* 'to say'; Efik *dóm,* Bantu **lóm-* 'to bite'; Efik *diá,* Bantu **lé* 'to eat'.

We also have Abraham's tonal material for another Semi-Bantu language, Munshi. Here again there is, in general, excellent agreement with reconstructed Proto-Bantu tonal forms. Most striking of all is the following. Not only is there point-for-point correspondence with the Bantu noun-prefixes but the peculiar tonal configuration by which all the pronouns referring to the noun clauses are high, except those of Meinhof's class 1 and class 9 which are low, is found both in Munshi and the Bantu languages.[8] A more intimate point of contact or one less likely to be borrowed is difficult to imagine.

2. *The irreversibility of certain changes.* In the Bantu languages we find a noun class with the prefix *ma-*. This class functions as the plural of the *li-* class which includes many objects which come in pairs. The *ma-* class also occurs in many names of liquids and other mass, i.e. indefinitely divisible substances. These nouns have no singular, or rather the singular-plural dichotomy is irrelevant. This disparity in meaning within the *ma-* class has often been noted by Bantu specialists. The explanation is clear if one considers the other West Sudanic

6 *The Phonetic and Tonal Structure of Efik* (Cambridge, 1933).
7 J. H. Greenberg, *The Tonal System of Proto-Bantu* (Word, vol. 4, pp. 196-208, 1948).
8 R. C. Abraham, *The Grammar of Tiv* (Kaduna, 1933), p. 13.

(Niger-Congo) languages. Here we have a set of classes referring to paired objects *li-* singular, *a-* plural and an entirely distinct *ma-* class referring to liquids and other mass nouns. The replacement of *-a* by *ma-*, a Bantu innovation, has caused these two classes to fall together in Bantu. The speakers of Semi-Bantu and other West Sudanic languages must have been comparative linguists to sort out these classes once more after they had coincided in Bantu. Here the Bantu situation can be explained by reference to the Semi-Bantu languages, but not vice-versa and borrowing by the Semi-Bantu languages is thus ruled out as a possibility.

Likewise in the analogous Bantu innovations **mu-* for **u-* and **mi-* for **i-* in the case of two other noun prefixes, the Bantu pronominals referring to these classes show **γu* and **γi*, rather than the expected **mu* and **mi*.[9] This can be explained in the light of Semi-Bantu and other West Sudanic forms as a survival from the period when the noun prefixes did not begin with a nasal. On the other hand, the Bantu forms cannot explain the Semi-Bantu and other West Sudanic forms.

Bantu has a verb *vî-ala* 'to give birth'. As a derivative from *vî* 'child' + *ala*, a verbal formative, it is quite understandable. But **vi* 'child' does not exist as a word either in Bantu or the Semi-Bantu languages, whereas it is the ordinary word for child practically everywhere else among the West Sudanic languages, and a Proto-West Sudanic form **bi* is generally assumed. The verb formation, on the other hand, is peculiar to Bantu. For the West Sudanic languages to have borrowed this word, would have required an analysis of the form *vî-ala* into its constituent elements and the abstraction of the form **vî-* in the meaning 'child'. I think we must reject any hypothesis which makes professional linguists out of the ordinary speakers of a language. But if not borrowed, then, unless the resemblance is accidental—a highly unlikely hypothesis—it must be the result of genetic relationship.

3. *The nature of the vocabulary involved.* It is precisely the most fundamental and common words, and in overwhelming numbers, which are involved. Thus there is correspondence between Bantu and the West Sudanic languages, including the Semi-Bantu, in the numerals two, three, and four, with Semi-Bantu in the numeral five also, while in the numbers above five there is no resemblance between Bantu and West Sudanic forms. Surely a set of languages which were so strongly influenced by another language that they borrowed the lowest numerals would not create the higher ones out of their own resources. In all examples

9 See Note 3 above.

of borrowed numerals of which I am aware, a language which borrows lower numerals also borrows higher ones.

Again one would expect that an influence which was strong enough to cause the borrowing of terms for parts of the body, pronouns, etc., would necessarily lead to the borrowing of less fundamental terms. But such *Kulturwörter* as the terms for axe, maize, guinea-corn, mat, are not among the terms which show agreement between Bantu and the Semi-Bantu languages. All our experience and common sense suggests that these would be the first terms borrowed.

4. *All West Sudanic words found in Bantu are found in Semi-Bantu also.* There appear to be no contrary instances to this rule. If there is genetic relationship of the kind assumed here the explanation of this phenomenon is simple. Just as no inherited Indo-European form can appear in English without having gone through Proto-Germanic, so no Proto-West Sudanic (= Proto-Niger-Congo) form can appear in Bantu unless it has been retained by the primitive language from which both Bantu and Semi-Bantu languages are descended. We do not have any direct record of this language any more than in the case of Proto-Germanic. There are, however, well over sixty Semi-Bantu languages. That some particular inherited form would be lost in all sixty languages simultaneously is highly unlikely. In practically all instances Proto-West Sudanic forms found in Bantu are also present in a good number of Semi-Bantu languages. This situation is difficult to account for on the basis of borrowing. It would involve a conspiracy on the part of the extremely diverse and numerous Semi-Bantu languages to always borrow the same terms from Bantu.

It may be well to explain at this point that the Semi-Bantu languages do not form a genetic unity as against the Bantu languages. They exhibit great diversity and, on the basis of special resemblances between individual languages, it has not been possible to reduce the number of distinct sub-groups beyond twenty-three.[10] Bantu is, then, simply one among twenty-four genetic sub-groupings within the subfamily of the Niger-Congo languages which I call the Central branch on geographical grounds. The term Semi-Bantu is no more justified than the term Semi-French to describe Italian, Spanish, Portuguese, and Rumanian. It has no usefulness beyond such a discussion as the present one.

5. *Supposedly transitional languages are really Bantu.* Certain languages of the northwest Bantu border area have generally been considered to be Semi-Bantu, although some difference of opinion exists.[11] Such languages are Bamum, Bali,

10 See the listing at the end of this article.

11 For example, N. W. Thomas has considered Jarawa to be Bantu while other writers have called it Semi-Bantu.

Banyen (Penin), Manyang-Konguang, and Jarawa. These resemble the Bantu languages more than the more distant Semi-Bantu languages, so that Bantu seemed, as it were, to spill over in this direction. The closer resemblance of these languages to Bantu seemed to suggest borrowing from Bantu which was less intense the farther one removed from the Bantu-Semi-Bantu border line. On the basis of vocabulary alone, I came to the conclusion some time ago that these languages must be Bantu and that the border-line between Bantu and Semi-Bantu is actually a clear one. These languages again and again show Bantu forms for those words in which Bantu is distinct from the Semi-Bantu languages and where Bantu lexical innovations are involved. Such are the words for 'salt', 'house', 'pig', 'crocodile'. Moreover, where information on plurals is available, they share the replacement of *a-* by *ma-* and the merging of this class with the *ma-* liquid, mass noun class discussed above. This conjecture was fully confirmed for the Banyen language at least by unpublished material of Mlle Dugast made available to me by the courtesy of Professor Martinet. No one examining this material can fail to see that this is a genuine Bantu language. Forms are all derivable by regular and frequently unobvious phonetic shifts from standard Proto-Bantu reconstructions. Such special Bantu features appear as the locative in *-ni*, the genitive particles consisting of the class pronoun + *a*, the singular diminutive prefix *hi* < P. B. **pî* which is not found anywhere outside of Bantu, etc. All of these languages seem to belong to the northwestern group of Bantu languages, of which Duala is the best-known.

If the evidence presented here is accepted, the reader will naturally inquire after the reasons which have induced all previous writers on this subject to accept the Bantu-Sudanese dichotomy as fundamental in African linguistics. I believe that the explanation is to be found in the history of our knowledge of Africa. The Bantu languages, which cover such a large section of Africa, were the first to come to the attention of scientifically trained observers and their unity was obvious, so that the existence of a Bantu language family was early established. By contrast the Sudanese area presents a chaotic picture and it was only in 1911 with the appearance of Westermann's *Sudansprachen* that the presence of wide-spread relationships among languages of the Sudan was demonstrated. By this time the separate status of Bantu was so traditional that a fundamental separation of the two groups was assumed. This was reinforced by evolutionary reasoning, in which, starting from a few well-known languages of the West Coast (e.g. Ewe, Twi, which were atypical in having lost their noun affixes), a sequence Sudanic = isolating, Bantu = agglutinative became fundamental for African

linguistics. Moreover, the field is so vast that workers in one area had little knowledge of the languages in the other.

Another consideration which has played its part is that the vast area and large numbers of speakers of the Bantu languages seemed to guarantee separate familial status. I have no doubt that if a language resembling Proto-Bantu were spoken by a small number of people in the Nigeria-Cameroon border area, it would have been classified with the other languages of the Benue-Cross (i.e. Semi-Bantu) group. Considerations of this kind are, of course, irrelevant. At present the speakers of Germanic languages number over 350,000,000, while those of the Tokharian branch number zero, Tokharian being extinct. This does not prevent Indo-Europeanists from considering Germanic and Tokharian as being coördinate branches of Indo-European and providing equally valid evidence for the reconstruction of Proto-Indo-European.

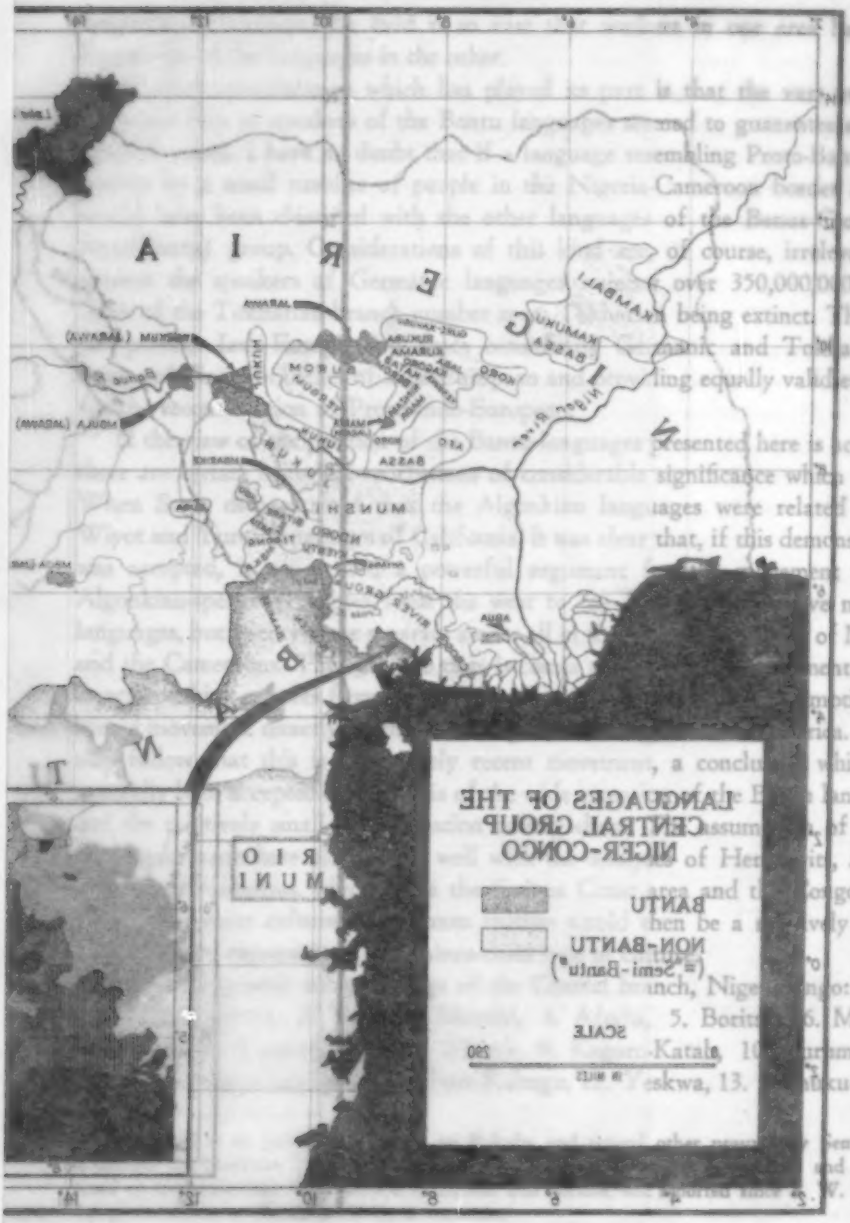
If the view of the position of the Bantu languages presented here is accepted, there are certain historical conclusions of considerable significance which follow. When Sapir demonstrated that the Algonkian languages were related to the Wiyot and Yurok languages of California, it was clear that, if this demonstration was accepted, it constituted a powerful argument for the movement of the Algonkian-speaking peoples from the west to the east. Here we have not two languages, but twenty-three separate stocks all in the same general area of Nigeria and the Cameroons. The evidence thus becomes strong for the movement of the Bantu-speaking peoples from this area southeastwards. The usual assumption has been a movement directly south from the great lake region of East Africa. It will also follow that this is a relatively recent movement, a conclusion which has generally been accepted on the basis of the wide extension of the Bantu languages and the relatively small differentiation among them. The assumption of Bantu movement made here also agrees well with the analyses of Herskovits, Ankermann, and Frobenius, which make the Guinea Coast area and the Congo basin part of the same culture area. Bantu culture would then be a relatively recent southeastward expansion of the Guinea-coast type of culture.

Tentative genetic sub-groupings of the Central branch, Niger-Congo:[12]

1. Cross River, 2. Yala, 3. Munshi, 4. Afudu, 5. Boritsũ, 6. Mbarike (Zumper), 7. Yergum, 8. Jaba (Ham), 9. Kagoro-Katab, 10. Burum, Piti-Chawai-Kurama, Ganawuri?, 11. Gure-Kahugu, 12. Yeskwa, 13. Kamuku-Bassa,

12 There is no published material on Rukuba and several other presumably Semi-Bantu languages of Northern Nigeria. The classification of Ninzam, Nungu, Mada, and Afo is based on numerals only. The location of Afudu and Boritsũ, not reported since S. W. Koelle's *Polyglotta Africana* (London, 1854), is uncertain.

FIG. 1. Languages of the Central Group, Niger-Congo Family. (Addendum: Nagumi, one of the Jarawa dialects, spoken on the Benue River, should be added to the map at 9 degrees N, 13-14 degrees E.)


NIGERIA
CAMEROON
BANTU
NON-BANTU
SCALE

14. Batu, 15. Ndoro, 16. Jukun, Kyentu, Nidu, 17. Tigong, 18. Mambila-Suga, 19. Bitare, 20. Koro, 21. Ninzam, Nungu, Mada, 22. Afo, 23. Anyang, 24. Bantu.

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SOMRONG SEN AND THE RECONSTRUCTION OF PREHISTORY IN INDO-CHINA[1]

EUGENE C. WORMAN, JR.

WITH THE CLOSE of World War II, American scholars in many fields of research, including archaeology, have developed a new interest in Southeast Asia. However, most of these scholars—especially the archaeologists—are discovering that information on Southeast Asia is not plentiful in the United States. The reason in the case of archaeology is partly that relatively little work has been done in the area and partly that much of the early literature dealing with it is not readily available in American libraries. Many students, associated with institutions whose orientation toward Asia is fairly recent, are therefore forced to use secondary sources which describe earlier work in summary form or which review the contents of previous publications. As is well known, such secondary sources tend to contain inaccuracies and misrepresentations in direct proportion to the distance they are removed from the original reports. This fact has recently been called to the writer's attention during the course of a study of the prehistoric site at Somrong Sen in Cambodia, Indo-China. It therefore seems worthwhile here to reëxamine the early reports on that site to determine whether its position in the archaeological picture is really as claimed and to utilize the site as an example in cautioning students against the uncritical use of secondary source material concerned with the archaeology of Southeast Asia.

Somrong Sen is peculiarly well-fitted to be the example employed for this purpose. Though it may not be the most important of Southeast Asian prehistoric sites, it is unquestionably one of the most famous. Its fame derives mainly from the fact that for a long time it was almost the only prehistoric settlement known in Cambodia. As such, it was visited by a great many persons interested in archaeology, and collections from it were carried all over the world. Artifacts from it were described in the literature of many countries. Early statements regarding the site and its contents were quoted and re-quoted until (as the saying goes) having been quoted at least three times, they were finally accepted as fact. The site is now traditionally used to illustrate the presence in Indo-China of a highly developed Stone Age culture. It is also frequently mentioned as represent-

1 Part of the material on which the following article is based was collected in 1947-48 while the author held a National Research Council Fellowship in the Natural Sciences. The author here wishes gratefully to acknowledge the assistance thus given him by the National Research Council in his research on the prehistory of southern Asia.

ing the link between a Stone Age and a Bronze Age in that part of the world. Therefore, if reasonable doubt can here be cast on the validity of statements regarding Somrong Sen, that doubt may eventually lead archaeologists not only to a much needed reëxcavation of the site but also to a review of the whole prehistoric archaeology of Southeast Asia.

Somrong Sen is located in Cambodia, southeast of the great Lake Tonlé Sap and on the right bank of a stream called the Stung Chinit (or a number of other similar names), which empties into the outlet of the lake some 30 kilometers below Somrong Sen and 30 kilometers south of the lake. Up to 1923, the site consisted of a large kitchen midden about 350 meters long by 180 meters wide and 6 meters deep. All but its highest portion was flooded annually during the rainy season. The mound was composed of beds of mud and freshwater shells, in which were to be found human bones, animal bones, stone, bone, and shell artifacts, pottery, and, according to reports, some copper and bronze objects. A modern village of 30 to 40 houses, with approximately 100 inhabitants, perched on piles at one end of the mound. During the dry season, the inhabitants of this village excavated shells from the midden, burnt them into lime, which was used for chewing with betel nut, and sold the lime throughout Cambodia. The mound was therefore covered with pits and holes from which shells had been extracted and in which surface collecting of archaeological specimens was fairly easy. Since 1923, conditions at the site may have altered somewhat as a result of further activities of the local limeburners or for other reasons.

Archaeological excavations in about 1901 and in 1923 showed the uppermost meter of the Somrong Sen midden to contain pottery almost indistinguishable from that used by the present-day inhabitants of the mound. The bulk of the material from the lower five meters of the midden, however, consisted of stone, bone, and shell artifacts and pottery which left little doubt that they represented the remains of a Stone Age people to whom the use of metal implements was unknown. The stone tools include a fairly large number of finely made, smoothed and polished axes, adzes, and gouges, which bespeak a considerable stoneworking skill on the part of their makers. These specimens are among the finest found in Indo-China. They are similar to certain artifacts occurring in the upper levels of a very few Stone Age sites near Bacson in northeastern Tonkin province, Indo-China. The lower levels of these latter sites—as well as the total depth of most sites near Bacson—contain chipped and smoothed, but seldom polished, tools of a less well-developed technique of manufacture. A few of this last type of artifact are found in even cruder assemblages of chipped, but seldom smoothed, stone implements in the region near Hoabinh, also in Tonkin province, near Hanoi,

and southwest of Bacson. The typological differences between many of the tools from Somrong Sen, Bacson, and Hoabinh are readily apparent, and these three type-areas have consequently given their names to the three Stone Age cultural periods currently recognized in Indo-China. Somrong Sen, with its technically advanced stonework and pottery, is considered to represent the latest of the three phases. Archaeological stratigraphy is rare in Indo-China, however, and there are few reasons, except typological ones, for considering Somrong Sen to be later than other Stone Age sites some distance removed from it. The first disquieting point to be observed about Somrong Sen, therefore, is that its date relative to Bacsonian and Hoabinhian sites is not well established. The fact that this date is determined typologically rather than stratigraphically is often overlooked by students familiar with the classic outline of prehistoric chronology in Indo-China.

A second doubtful point is concerned with the type of culture represented at Somrong Sen. Stone objects and pottery from that site are usually identified as "Late Neolithic" or "Full Neolithic," in comparison to the Bacsonian and Hoabinhian artifacts which are classed as "Middle Neolithic" and "Early Neolithic" respectively. This identification is erroneous from a technical point of view. The most generally accepted idea of a Neolithic culture is that it is a food-producing one in which the art of metal-working is unknown. By food-producing is meant the intentional production of food by means of agriculture or animal husbandry. Traces of these two traits are therefore to be sought in any site to which the designation "Neolithic" is given. Accompanying the earliest indications of food-production in many parts of the world are pottery and smoothed stone tools, which frequently seem to go hand in hand with agriculture and a settled life. Being durable, these last two traits have often been taken as the tangible criteria of Neolithic culture. They cannot, however, be used as indubitable evidence of food-production when more direct proof is unavailable. At Somrong Sen, in spite of the excellence of its stoneworking and pottery-making, there is as yet no reported trace of agriculture or of animal husbandry in the form of cultivated vegetable foods or the bones of domesticated food-animals. There is still some doubt, therefore, that the people of Somrong Sen were food-producers rather than highly developed food-collectors and hunters of wild game, who had borrowed the techniques of making pottery and smoothed stone tools from more advanced neighbors elsewhere. Thus, while there is no question that most of the Somrong Sen midden was laid down in Stone Age times, the culture therein cannot be classed more specifically than "quasi-Neolithic" until the remains of cultivated plants are discovered there or until some of the many animal bones unearthed there are identified as belonging to domesticated types used for food. The same,

incidentally, may be said of all other supposedly Neolithic Stone Age sites known to the writer from Indo-China.

The third point—a supposition that Somrong Sen represents a link between a Stone Age and a Bronze Age in Indo-China—is even less susceptible to proof than those discussed above. Up to the close of World War II, the Bronze Age in Indo-China was almost exclusively known from a settlement and cemetery site at Dongson in northern Annam, dating possibly from the 4th or 3rd century BC to the 1st century AD. Strong Chinese influence is evident in the artifacts recovered here. Most of the tools and weapons, as well as utensils and ornaments of metal, are made of bronze or copper, indicating that the people living on the spot existed in an Age of Bronze. A few weapons and other objects made of iron, however, suggest that at Dongson the end of a Bronze Age and the beginning of an Iron Age may be observed. The presence of historically datable material at the site shows that bronze was not extensively supplanted by iron in this part of Indo-China until at least the early part of the Christian era. This is a date considerably later than in China to the north and India to the west. Elsewhere in Indo-China a Bronze Age is less well known. Objects of copper and bronze have been discovered at a number of prehistoric archaeological sites. The majority of these objects are surface finds, which cannot be associated with any specific type of culture. Some have been reported as lying just under the ground surface in deposits in caves, rock shelters, and open-air kitchen middens whose lower levels contain stone implements. Few artifacts have occurred in large enough numbers to indicate that the people abandoning them were accustomed to using metal articles in their everyday life. At Somrong Sen, however, sufficient metal objects have been collected and reported to suggest that here a definite transition of culture from a stone-using one to a metal-using one may be traced. Somrong Sen is therefore frequently mentioned as a prehistoric site of fairly late date, whose Late Stone Age inhabitants were gradually becoming accustomed to the use of metal. Its date is generally assumed to range between 1200 BC and the last few centuries BC though there is no evidence whatever that metal was used in Indo-China prior to the 5th or 4th century BC.

Unfortunately, the general impression that metal implements in some numbers have been dug from at least the upper portions of the Somrong Sen mound appears to be unfounded. In fact, there is no proof of which the writer is aware that a single copper or bronze object reported from Somrong Sen was actually dug out of any part of the mound by any of the persons describing the site. The following statements may make this clear.

The mound of Somrong Sen was discovered in 1876 by a gentleman named

Roque (or Roques), who, so far as the writer can determine, left no record of publication or collection of artifacts from the midden.[2]

In the following year a M Ratte published a note (not seen by the writer) which mentions a shell midden at the mouth of the Stung Chinit in Cambodia and which describes three types of stone implements as having been discovered in Cochin China, Annam, and Cambodia.[3]

Also in 1877, a Lt Moura, who represented French interests at Phnom-Penh, Cambodia, gave to the Musée d'Histoire Naturelle de Toulouse a collection of four stone implements he had found at an unnamed shell refuse mound, apparently Somrong Sen.[4] He subsequently sent to the same museum a larger collection of artifacts definitely stated to have come from Somrong Sen.[5] In addition to the implements, utensils, and ornaments of stone, shell, and pottery, Moura's finds included two large copper rings, a smaller ring, seven fragments of rings, a socketed bronze axe head, two bronze arrowheads, a bronze hook, and two bronze plaques. Elsewhere it is stated that one ring contained 12% of tin (hence this is definitely bronze); another ring, the axe, the arrowheads, and the hook held between 3% and 5% of tin. J. B. Noulet, who first published these finds, nowhere states that Moura made any excavations in the mound, and Moura himself, publishing later in 1882 and 1883,[6] says "These objects of human industry are extremely rare at Somrong Sen, and those which the museum at Toulouse has inherited were collected one by one by the lime-burners, who preserved them as relics in their habitations for many years." Cartailhac,[7] reviewing Noulet's publication in 1879, also comments on the fact that the artifacts were not collected by persons scientifically studying the deposits and that there is no indication that the bronzes and stone tools came from the same levels. The obvious supposition is that Moura obtained the majority of his collection from the villagers then living on the site.

The next visitor to Somrong Sen seems to have been a Dr Corre, who first went there in 1879 but found the mound flooded.[8] Corre revisited the spot in 1880. He reported on his finds three times, in 1879, 1880, and 1884, in a periodical entitled "Excursions et reconnaissances de la Cochinchine Française," which

2 Mansuy, *Stations préhistoriques de Somron-Seng*, p. 2; Finot, *Ludovic Jammes*, p. 473.
3 Noulet, *L'âge de la pierre dans l'Indochine*, pp. 99, 100.
4 *Idem*, p. 98.
5 Noulet, *L'âge de la pierre polie*, pp. 315-323.
6 Moura, *Le Cambodge préhistorique*, p. 506; *idem*, *Le royaume du Cambodge*, pp. 134, 135.
7 Noulet, *L'âge de la pierre polie*, p. 322.
8 Finot, *op. cit.*, p. 477.

the writer has been unable to locate. In all three notes, Corre discusses Stone Age and Bronze Age objects from Somrong Sen. He also apparently mentions a white precipitate produced on certain bronze weapons when treated with acid, indicating that he obtained some metal objects during his visits.[9] Their provenance, however, is not known to the writer.

About 1882, a man named Edmond Fuchs was also on the Stung Chinit, but he specifically states that at the time of his visit he was too sick to debark from his boat and climb the river bank at Somrong Sen.[10] Some implements which he presented to a scientific society in France in 1882 could not well have been excavated by him from the refuse midden.

The next and strangest of all visitors to Somrong Sen was a M Ludovic Jammes, who appears to have been one of the most shameless prevaricators ever to indulge in archaeology. In 1887-1888 Jammes made a tour of Cambodia, during which he claimed to have discovered fifteen shell middens in the neighborhood of Lake Tonlé Sap.[11] Of these he has named only seven, including Somrong Sen and An-luon-padau, both previously known, and five others hidden away in the jungle. Jammes claims to have excavated pits in four of the fifteen mounds, of which only two, Somrong Sen and An-luon-padau, can now be located. According to Jammes, he dug 150 pits in the Somrong Sen mound, which he described as being eight times larger than it actually is. Though he dug only isolated pits, and though he noted that the mound had already been disturbed by floods and the activities of lime-burners, Jammes says he discovered a most amazing variety of remains here and in the three other mounds he excavated. In the first place, he claims to have identified three distinct levels in the middens. In the bottom one he says he found only stone implements. In the middle one were stone and bronze artifacts. In the uppermost one, bronze articles outnumbered stone ones. In the second place, Jammes states that he found innumerable burials, which he describes in detail. Skeletons were discovered lying extended, contracted, some prone, some supine, some with arms crossed over the head, some with the head inside an earthenware vessel to protect it from the earth around it. Bracelets, necklaces, ear plugs, and other ornaments are stated to have been found in place on the arms, necks, and near the ears of the skeletons. Near the heads of most burials were pottery vessels containing the remains of food, birds, fish, and shellfish. Stone celts and bronze tools were also found on or near the skeletons. None of the skeletons was ever brought back to civilization by Jammes, and only his word is

9 Fuchs, *Station préhistorique de Som-Ron-Sen*, p. 359.

10 *Idem*, p. 357.

11 Jammes, *Les anciennes civilisations de l'Indochine*, pp. 36, 40-42; Finot, *op. cit.*, p. 475.

available as to the rest of the things he saw. No one, either before or after Jammes, has ever found any precise stratigraphy within the Somrong Sen mound. No other archaeologist has reported complete burials, human bones being invariably mixed with animal bones in the kitchen debris. No one has obtained more than a few rare bronze objects at the site.

As for bronze objects, Louis Finot, who is mainly responsible for exposing Jammes, states that Jammes himself never reported more than thirty-five of them from all his excavations although they were supposed to outnumber stone tools in the upper levels of prehistoric mounds.[12] Finot further intimates that there may never have been any bronze objects in Jammes' collections. This seems almost incredible, in view of the fact that Jammes presented a description of his finds to the Congrès d'Anthropologie et d'Archéologie Préhistorique de Paris in 1889, on the basis of which Emile Cartailhac wrote an article, with illustrations, in 1890, in which he states that a Dr Felix Garrigou had analyzed some of the specimens.[13] In 1891 M Ernest Chantre also presented to a meeting of the Société d'Anthropologie de Lyon a number of copper or bronze artifacts from Jammes' collections, including five socketed celts, one knifeblade, one chisel, one spearhead, some bracelets or rings, and five bells, which were apparently the same ones described before the Congrès in 1889.[14] The Jammes' collections were sold to the Smithsonian Institution of Washington, D. C., in 1890 and 1898—without the bronzes.[15] It is an interesting speculation as to what has become of the bronzes, if any, which were so carefully described by Jammes. There is little doubt, however, that Jammes' veracity may be questioned and that his statements regarding bronze finds should not be accepted without further investigation.

About 1901, Henri Mansuy made the first major excavation at Somrong Sen, removing some 400 cubic meters of earth and in one place reaching the watertable at the base of the mound.[16] During the course of this excavation, Mansuy found many animal and some human bones, about 200 stone implements, thousands of potsherds, and three whole pottery vessels. He purchased from the local villagers four bronzes, a triangular arrowhead with tang and wings, a hollow cylindrical stem or shank belonging to some unidentifiable object, and two bells with elliptical cross section and rings for suspension. Not one bronze artifact was dug by him from the midden itself.

12 Finot, *op. cit.*, p. 477.

13 Cartailhac, *Les bronzes préhistoriques du Cambodge*, p. 650.

14 Anonymous, *Objets antiques en pierre*, pp. 44-46.

15 Finot, *op. cit.*, p. 474; Casanowicz, *The Collections of Old World Archeology*, pp. 432, 433.

16 Mansuy, *Stations préhistoriques de Somron-Seng.*

In 1909, F. Vitout made a short visit to Somrong Sen, during the course of topographic studies in Cambodia.[17] He made a small collection of articles from the mound. Some objects were obtained by him from trenches dug by the local inhabitants. Others were bought from the villagers. The only piece of bronze he obtained was a fine socketed celt in good state of preservation. This he bought from the natives.

In 1923 Mansuy made a second series of excavations at Somrong Sen and acquired more of the same sort of thing he had found in his first excavations.[18] Of the five bronze objects collected by him, four were purchased from the villagers. The provenance of the fifth is not stated. The items include a simple ring, a sort of rough chisel, a barbed hook, and two bells. Also found or purchased during these excavations was half of a sandstone mold for the casting of a metal cleaver or chopper. No details as to its acquisition are given.

Finally, Olov Janse reports that in 1935 he made a trial trench in the mound at Somrong Sen.[19] The details of the dig have not yet been published insofar as the writer can ascertain. In preliminary reports, however, Janse states that at Somrong Sen he obtained a certain number of prehistoric objects as well as some bronzes which appear to be contemporary to those of the Chinese Han period (200 BC–200 AD). He also states that he acquired several articles, found accidentally in the region, which can be considered as vestiges of a civilization related to that of Dongson in Annam. Both references are probably to a bronze Ko, a bronze ring, and an item shaped like a bell, which Janse illustrates.

A few other persons, including MM Aymonier, d'Argence, Dumoutier, Lajonquiere, and Parmentier, have apparently made small collections at Somrong Sen, most of which are now in the Musée de l'École Française d'Extrême-Orient at Hanoi. The writer thinks, however, that no serious excavations other than those mentioned above have taken place at the site. Of the digs mentioned, those possibly made by Corre seem to be the only important ones described in literature unavailable to the writer. It therefore seems clear that very few, if any, bronze artifacts have actually been excavated from the Somrong Sen midden and that there is as yet no substantial proof of a transitional Stone-Bronze Age culture ever having existed there.

If the bronzes do not come from Somrong Sen itself, there are several possible explanations for their presence there. The region surrounding Lake Tonlé Sap

17 Vitout, *Note sur quelques objets préhistoriques de Samrong Sen*, pp. 114-120.

18 Mansuy, *Résultats de nouvelles recherches.*

19 Janse, *Rapport préliminaire d'une mission archéologique en Indochine*, vol. 10, p. 44; *idem, Archaeological Research in Indo-China*, Preface, p. v.

is full of archaeological sites of varying dates, many of them east and southeast of the lake and near Somrong Sen. Angkor Wat is only about 175 kilometers northwest of Somrong Sen. There is therefore a distinct possibility that the modern people of Somrong Sen obtained their bronzes from other sites of much later date than the one on which they lived. Possibly not being metallurgists themselves, the villagers may have acquired archaeological bronzes from elsewhere in order to avoid the necessity of paying for iron articles of modern manufacture. If they know the art of smelting, however, they may have obtained old bronzes to melt down for subsequent use in other forms. Again, they may hold certain superstitious beliefs about the protective or curative properties of antiques such as bronze axes and adzes. The greatest probability, to the writer's way of thinking, is that the villagers quickly realized the money value of bronze objects which could be sold to French archaeologists and that they made especial efforts to collect them wherever possible to present to visitors when the need arose. This is not an unknown procedure, and the widespread trade in lime carried on by the people of Somrong Sen would have made it easy for them to obtain bronzes from other persons with whom they traded.

On the other hand, if the Somrong Sen bronzes were actually dug from the mound either by archaeologists or by the local villagers, they probably represent advanced Chinese or Indian traits introduced into the area as trade objects rather than indigenous manufactures. There is no background for a belief that bronze-working was locally developed by the stone-using people of Southeast Asia on their own initiative. Rather, it appears that bronze was brought into Indo-China from China at the time of the first historic Chinese movements into the former area.

The writer is not an expert in south Chinese and Indo-Chinese protohistoric and historic archaeology. Nevertheless, it seems to him that some of the Somrong Sen bronzes show a certain amount of Chinese influence. Janse says that objects acquired by him at Somrong Sen are similar to others of Han date.[20] One of these objects, a Ko (or halberd), is certainly a Chinese type of weapon. One of Janse's and one of Mansuy's bells from Somrong Sen are of the same general shape as those from Dongson, Annam,[21] though they differ in detail. Barbed hooks found by Moura and Mansuy are similar to some from Luang Prabang, Laos, and Lamma Island near Hongkong.[22] One of Moura's celts with an almost

20 Janse, *Rapport préliminaire*, vol. 9, no. 3, p. 147.

21 Janse, *Archaeological Research in Indo-China*, plate 62.

22 Mansuy, *L'industrie de la pierre et du bronze*, plate 5, fig. 14; Finn, *Archaeological Finds on Lamma Island*, vol. 6, no. 2, plate 11.

circular cutting edge is somewhat like certain celts from Luang Prabang. A socketed spearhead figured by Jammes (which may or may not come from Somrong Sen) is fairly close to one found by Janse at Dongson, but it has no perforations in the blade. A knife blade also reported by Jammes is decorated with a running spiral design similar to those on objects from Dongson, the Huai valley, and other parts of China.[23] Finally, one of Mansuy's bells is made of imitation filigree work resembling in technique, though not in shape, bells unearthed by Mlle Colani in a field of monolithic stone jars at Ban Ang, Laos, in another similar field at Ban Xot, Laos, and in a cemetery of pottery burial urns at Sa-huynh, Annam.[24] Other finds at these last three places included iron implements, glass beads of many kinds, glazed pottery, some bronzes, and other articles of dates probably well into the Christian era. Most of the sites mentioned above may belong in the first few centuries AD.

Insofar as the writer has been able to gather, the first significant Chinese influence reached northern Indo-China about the 4th century BC. Subsequently, a Han Empire province was established in Tonkin and northern Annam and much of Indo-China came under Chinese domination. From the 1st century BC onwards, Chinese influence was strong within the area. Chinese-like bronzes from Somrong Sen should therefore date not earlier than the 4th century BC.

As for the Somrong Sen bronzes which show no particular likeness to Chinese material, the writer dares not hazard a guess. He is ignorant of the small finds excavated from the many Hindu-ized sites of Cambodia such as Angkor Wat, though he suspects that few of them have been published in detail. If any of the Somrong Sen artifacts are similar to them, they probably date from well into the Christian era.

Regardless of the above possibilities, however, no positive evidence concerning the origin of the Somrong Sen bronzes is yet forthcoming. Therefore, until such bronzes can be definitely placed with other items in the mound, the site has to be classified as a purely Stone Age deposit. Its date, which remains entirely conjectural, cannot in any way be connected to those of the earliest documented bronze finds in Indo-China.

Thus, with doubt cast on the authenticity of bronzes reported from Somrong Sen, it becomes apparent that until further studies of the site are made, very little reliable information regarding it exists. Neither its relative chronology nor

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23 Janse, *Un groupe de bronzes anciens*, fig. 22; Karlgren, *The Date of the Early Dong-so'n Culture*, pp. 10, 11, 24.

24 Colani, *Mégalithes du Haut-Laos*, vol. 2, p. 61, fig. 164; p. 85, figs. 190, 191; p. 84, fig. 190.

its precise cultural horizons are established, and the site cannot properly be considered to belong either to a Neolithic period or to an incipient Bronze Age. That this should be true after all the years Somrong Sen has been known to archaeologists is proof of the lack of interest that trained scholars other than historians and epigraphists have had in Southeast Asian archaeology. It shows clearly the need throughout Indo-China for a careful reëxamination of earlier archaeological work and for a well-planned program of modern excavation by professional archaeologists. It is to be hoped that such a program will some day be carried out.

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SIERRA POPOLUCA KINSHIP TERMINOLOGY AND ITS WIDER RELATIONSHIPS

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THE LANGUAGES known as Popoluca of Veracruz consist of four related but not mutually-intelligible groups in southern Veracruz, on the north end of the Isthmus of Tehuantepec. Sierra Popoluca is spoken by about 10,000 persons living in approximately twenty-five towns and villages. Texistepec Popoluca, Oluta Popoluca, and Sayula Popoluca are limited to the towns of the same name. The expression "Popoluca of Veracruz" is an unfortunate misnomer, since it conveys an impression of closer linguistic relationship than is the case. The Sierra and Texistepec languages appear to be more closely allied to the various Zoque dialects of Chiapas, and with those of Santa María Chimalpa and San Miguel Chimalpa, in southern Oaxaca, than to the other "Popoluca" languages. Conversely, Oluta and Sayula Popoluca appear to be more closely related to the Mixe languages of Oaxaca, than to Texistepec and the Sierra. Use of the term "Popoluca" by members of the four groups, plus the fact that almost nothing has been known about them until very recent years, accounts for the misnomer. For better or worse the terminology is now established in the literature, and doubtless will continue to be used.

This paper outlines the present-day Sierra Popoluca kinship terminology, and compares this picture to other modern Mixe-Zoque forms, as well as to earlier Mixe and Zoque systems. The data for the Sierra were recorded in Soteapan, *cabecera* of the *municipio* of the same name, in 1941, and rechecked in 1944.

Consanguineal terminology: Few systems in any part of the world show the basic simplicity characteristic of this category. The terms used are:

hà·tuŋwéweh	grandfather
ʔapčó·mo	grandmother
hátuŋ	father
ʔá·pa	mother
ʔá·či	older brother
¢ʌ́·¢ʌ	older sister
há?yuk	younger sibling
tʌ́·wʌ	sibling
¢ʌ́·ši	child
mánʌk	child (son understood)

yo·mmánʌk	daughter
ʔokmánʌk	grandchild

Both males and females use the same terms. The system is completely bilateral in that no distinction is made between mother's or father's parents, or son's or daughter's offspring. By extension of four of these terms, all collateral relatives may be classified, as follows:

The term for older brother (ʔá·či) is extended to include older male cousins, father's or mother's brothers either older or younger than they, and grandparent's brothers either older or younger than they.

The term for older sister (ɕʌ́·ɕʌ) is extended to include older female cousins, father's or mother's sisters older or younger than they, and grandparent's sisters older or younger than they.

The term for younger sibling (háʔyuk) is extended to include younger cousins, male or female, nephews and nieces, and grandnephews and grandnieces.

The term for sibling (tʌ́·wʌ) is also used for male or female cousins of approximately ego's age.

This system, apparently inflexible in basic outline, is modified at a number of points in daily usage. Thus, lumping all older collateral relatives together, differentiating by sex but not by age, appears illogical alongside the sharp generation distinctions of the ascending lineal column. In reality, grandfather is simply "old father" (suffix -wéweh [Aztec huehue] "old"). Grandmother is "old mother" (combining form of ʔá·pa + čó·mo "old woman"). Hence, descriptive modifiers have stretched basic words over two generations. When there is need for more precise distinction when dealing with collateral relatives, the same thing may be done. Thus, a great uncle, normally addressed or referred to as ʔá·či, may be called ʔačwʌ́day (wʌ́day "old man"). Similarly a great aunt, or an aunt much older than either parent, may be called ɕʌ́·ɕʌ wʌčó·mo (čo·mo "old woman"). Spouses of uncles, aunts, and great uncles and great aunts are addressed by the corresponding term for consanguineal relatives of the same age category. Great-grandparents are called by the grandparent terms or, like any respected oldsters, may simply be called wʌdyáya or wʌčó·mo. There is some tendency to extend grandparent terminology to grandparents' siblings, i.e., há·tuŋwéweh "great uncle" and ʔapčó·mo "great aunt."

The combining forms of yó·mo "woman," "wife," and háya "husband," may be used with terms which do not express sex for descriptive purposes, e.g., yo·mtʌ́·wʌ "female sibling," and haytʌ́·wʌ "male sibling." Descriptively a granddaughter is distinguished in the same way: yò·mpʌk aʔnokmánʌk "my female

grandchild." Likewise, the combining forms of ʔá·či, ¢ʌ́·¢ʌ, and háʔyuk may be used to express relative age with respect to the person in question. Thus, ʔàčpʌk ammánʌk "my older son," haʔyukpʌk ammánʌk "my younger son," ¢ʌ̀·¢pʌk anyo·mmánʌk "my older daughter," hàʔyʌkpʌk anyo·mmánʌk "my younger daughter."

Affinal terminology: This category is characterized by two principles not found in the consanguineal category: indication of sex of speaker in some terms; use of reciprocal terms for some relationships. As will be pointed out later, these features probably were much more significant and extensive formerly than at present. Terms used are:

Man speaking		*Woman speaking*	
	mʌ̀ʔʌtha·tuŋwéweh	spouse's grandfathers	
	mʌ̀ʔʌdapčo·mo	spouse's grandmothers	
	mʌʔʌttʌ́·wʌ	spouse's sibling's spouse	
	mʌʔʌt	son-in-law	
	sá·ki	daughter-in-law	
mʌʔʌthá·tuŋ	wife's father	¢úʔu	husband's father
mʌʔʌdá·pa	wife's mother	sá·ki	husband's mother
yó·mo	wife	háya	husband
ʔʌ́·mʌ	brother-in-law	ká·pay	brother-in-law
ká·pay	sister-in-law	ʔóhyah	sister-in-law

It is seen that reciprocal terms are used between the mother-in-law and daughter-in-law (sá·ki), brothers-in-law (ʔʌ́·mʌ), sisters-in-law (ʔóhyah), and siblings-in-law of the opposite sex (ká·pay). By eliminating the qualifying parts of the compounds for wife's parents (há·tuŋ, ʔá·pa), a parent-in-law/son-in-law reciprocal is found to exist.

More distant affinal relatives have no special terms, and normally are called by the corresponding consanguineal term. Thus one's wife's father's brother is called ʔá·či, just as one's father's brother. Descriptive expressions, not properly kinship terms, are used to identify such individuals precisely.

Popoluca kinship terminology is completed by other terms which do not fall directly into the first two categories. These terms are:

čá·ñi	one's child's spouse's parent
kupé·ha	husband's other wife (wives)
¢ʌñmánʌk	children of husband's other wife (wives); stepchildren

TABLE 1. COMPARATIVE MIXE-ZOQUE KINSHIP TERMINOLOGIES

	Zoque Division						Mixe Division					
	Popoluca Branch		Zoque Branch				Mixe Branch				Popoluca Branch	
	Sierra	Texistepec	San Miguel Chimalpa	Santa Maria Chimalpa	Tuxtla Gutierrez	Copainalá	Guichicovi	Huitepec	Ayutla	Tatontepec	Oluta	Sayula
Grandfather	hatuŋmeh	omʌda	hatuŋapu	[1]ʔapupʌn	ʔaɕu	ʔoko	tedap	dejamaʔay	tetmeay	ap	apu	apwi
Grandmother	ʔapčomo	appʌdu	mamaʔoko	okoɕaⁿmʌʔ	ʔoko	ʔoko	tahʔok	dagamaʔay	[1]dokmoiis	ok	tata	ogoy
Grandson	ʔokmanʌk	aŋbanⁿba	okomanʌk	apuɕʌšˌi	man's grand-child: ʔašuʔune	ʔokoʔune	okuŋk	okʌɕ	uɕu ap	ap	tata	okway
Granddaughter	ʔokmanʌk	aŋbanⁿba	okomanʌk	okaɕʌšˌi	woman's grand-child: ʔokoʔune	ʔokoʔune	okuŋk	okʌɕ	apas	ok	tata	okway
Father	haˑtuŋ	om	hatuŋ	hatoŋ	hata	tatah	teeť	dejˇ	data	teˌtata	tʌhao	tet
Mother	ʔaˑpa	ap	mama	mama	mama	nanah	tah	dagaɕˌdag	[2]dagiɕ	takˌnana	ɕaʔk	mam
Son	manʌk	man	manʌk	haˑteɕʌšˌi	ʔune	ʔune	uŋk	uʔuŋk	mangueˌ	———	uʔnaʔ	way
Daughter	yoˑmmanʌk	yomba	yommanʌk	yomaɕʌšˌi	yomaʔune	ʔune	tašuŋk	uʔuŋkˌnʌjʌɕ	nuˑšiɕ	———	uʔnaʔ	taʔčway
Child	ɕʌˑši	tʌɕ	———	ɕʌšˌi	ʔune	ʔune	uŋk	uʔuŋk	unkˌmank	unuk	uʔnaʔ	way
Uncle	ʔaˑči	aⁿˇč	ači	ačˌi	ɕʌni	ɕʌni	ɕuguum	ɕugum	ɕugum	em	kuʔuy	apwi
Older brother	ʔaˑči	aⁿˇč	ači	ačˌi	kuku	ʔaɕi	ahˇč	ahˇč	aˇč	aˇč	ačˌi	aˇč
Aunt	ɕʌˑɕʌ	dʌɕ	ɕʌɕʌ	ɕʌˑɕʌ	ʔemeʔ	[1] ʔeme	okmam	ɕugu	ɕugu	tukuk	———	ogoy
Older sister	ɕʌˑɕʌ	———	ɕʌɕʌ	ɕʌˑɕʌ	Koseʔ	[2] Kose	ɕʌʌ	ɕʌʔʌɕ	ɕu	ɕäü	ačˌi	suʔuˌaˇč
Sibling	tʌˑwʌ	tʌw	awiñ	awiñ	tʌwʌ	———	———	———	[3]mōguhɕua	———	mʌʔku	hewe
Cousin	tʌˑwʌ	tʌw	awiñ	———	Spanish	Spanish	———	nuɕuɕ	sibling	———	———	———
Younger sibling	haʔyuk	———	———	———	poɕoʔ	poɕo	uˇč	nuɕuɕ	udšiɕˌiˇč	uɕ	makɕʌ	masʌk
Nephew	haʔyuk	dʌba	awiñ	Spanish	ɕʌniʔune	ɕʌniʔune	———	ɕomaŋk	ɕukmank	———	makɕʌʔ	heway
Niece	haʔyuk	dʌba	awiñ	Spanish	ʔemeʔune	ʔemeʔune	———	ɕonʌšr	ɕuknišˌ	———	makɕʌʔ	heway
Husband	haya	naŋ	haya	haya	haya	hayah	ñaay	ñayek	neyekwiɕ	———	yoʔbe	yaʔo
Wife	yoˑmo	ñʌñiʔ	yomaʔ	yomʌ	yomo	yomo	toˇjʌk	doojiɕ	nedoʔšiɕ	———	mahhao	toʔsray
Man's son-in-law	mʌʔʌt	mʌtom	muʔt	mʌʔut	moʔut	———	mʌʌt	mʌʔtʌɕ	miuht	———	———	———
" " dau-in-law	saˑki	———	hasaki	ɕaˑki	ɕusi	———	hajeep	ɕuʔuɕ	ɕutˌčuʔu	———	———	———
" "mother-in-law	mʌʔʌdaˑpa	mʌtap	yomʌmuʔt	okoʔmʌʔut	moʔut	moʔoht	sokˀ	mʌʔtošˇčʌk	muktak	———	———	———
" "father-in-law	mʌʔʌthaˑtuŋ	———	muʔt	mʌʔut	moʔut	moʔoht	mʌʌt	mʌʔtʌɕ	muktait	———	———	muhtnay
Woman's son-in-law	mʌʔʌt	———	muʔt	mʌʔut	moʔut	———	mʌʌt	mʌʔtʌɕ	muktak	———	———	———
" " dau-in-law	saˑki	———	hasaki	ɕaki	sake	———	sokˀ	šrekˇšiɕ	[4] šrekˇšiɕ	———	———	———
" "mother-in-law	saˑki	———	suŋmama	ɕaki	sake	sake	sokˀ	nana	[4] sreksiɕ	———	———	———
" "father-in-law	ɕuˑʔu	———	suŋhatuŋ	ɕuˑki	ɕusi	———	hajeep	tata	ɕutˌčuʔu	———	———	———
Man's brother-in-law	ʔʌˑmʌ	Spanish	pini	pini	piniˑtʌwʌ	pini	huy	nʌyiɕ	huy	———	———	huyi
Women's sister-in-law	ʔahyah	Spanish	oyah	oyah	ʔohyaˑtʌwʌ	———	oyh	ʔayi	ohih	———	———	———
Sibling-in-law of Opposite sex	Kapah	Spanish	Kapah	Kapayh	Kapay	———	gapič	gapiɕ	[5] ingopis	———	———	———
			also: 1 okomuʔt	also: 1ɕaʔmʌʔ		In Ocotepec 1 ɕuʔsi 2 ɕʌɕʌ			also: 1 takmay 2 ngna 3 sister-daughter 4 sen s 5 kap			

TABLE 1. COMPARATIVE MIXE-ZOQUE KIN SHO

	Zoque Division				Mixe Division	
	Popoluca Branch		Zoque Branch		Mixe Branch	
	Sierra	Texistepec	San Miguel Chimalapa	Santa María Chimalapa	Guichicovi	Copainalá
Grandfather						
Grandmother						
Grandson						
Granddaughter						
Father						
Mother						
Son						
Daughter						
Child						
Uncle						
Older brother						
Aunt						
Older sister						
Sibling						
Cousin						
Younger sibling						
Nephew						
Niece						
Husband						
Wife						
Man's son-in-law						
" " daughter-in-law						
" " mother-in-law						
" " father-in-law						
woman's son-in-law						
" " daughter-in-law						
" " mother-in-law						
" " father-in-law						
Man's brother-in-law						
Woman's sister-in-law						
Sibling-in-law of Opposite sex						

¢ʌñtʌ´·wʌ	half siblings by same father to each other
¢ʌ²ñá·pa	father's other wife (wives)
¢ʌñhá·tuŋ	stepfather
²óko	godmother
²okhá·tuŋ	godfather
²okmánʌk	godchild
kompáni	(Sp.) compadre
kumáni	(Sp.) comadre

Actually, only three new basic terms are used: ča·ñi, kupé·ha, and ²óko. The step series is formed by adding the corresponding basic lineal term to the prefix ¢ʌñ-. Godfather and godchild are formed by adding the basic terms for father and child to the prefix ²ok- (which, as will be seen below, is a widespread and presumably ancient form in Mixe-Zoque systems). Note also that godchild and grandchild are expressed by the same term. Modified Spanish forms for compadre and comadre—social relationships presumably not present in pre-Conquest times—are the only non-Popoluca terms in general use.

The kinship terminology is functionally suited to the present social organization of the Sierra Popoluca. There are no clans, and though Soteapan—and probably the other larger villages—is divided into two *barrios*, they appear to be non-functional as far as relation to kinship is concerned. Family affiliation and descent appear to be completely bilateral, and marriage between cousins is forbidden. Households are elementary in composition. A numerically small but sociologically significant number of families are polygynous. Sometimes this institution is of the sororal type, in which case the two or three wives live in the same house. When it is non-sororal the wives tend to live in separate houses not parts of the same patio cluster. Lack of distinction between male and female lines is in accordance with the bilateral family organization. The lumping of all older collateral relatives with older brothers and sisters, depending on sex, is a device admirably suited to coping with the confusion created by many other collateral step-relatives, i.e., the relatives of one's father's other wives. This also holds true for the equating of younger siblings with all younger collateral relatives.

The feature which appears to bear least resemblance to present social organization is the reciprocal terminology for siblings-in-law. This is also found among other Mixe-Zoque groups (as will be pointed out), among the ancient Maya,[1]

1 Fred Eggan, *The Maya Kinship System and Cross-Cousin Marriage* (American Anthropologist, vol. 36, pp. 188-202, 1934).

ancient and modern Huastec,[2] and modern Tzeltal.[3] It is one aspect of a common principle characterizing Spier's "Acoma" type system, i.e., three reciprocal terms to indicate relationships between males, between females, and between persons of the opposite sex.

Sufficient data are at hand to place Sierra Popoluca kinship terminology in relation to contemporary terminologies of most Mixe-Zoque groups. Key terms, and their equivalents in eleven additional groups, are given in Table 1. Copainalá Zoque terms were communicated by Mr William Wonderly: Ayutla and Totontepec Mixe are from Beals.[4] The remaining data are from the author's field notes, in most cases taken "on the fly," hence subject to future phonemic refinement, and doubtless to some modification and correction. Beals' phonetics have been normalized to conform to the system used in all other cases. Blank spaces indicate no data available. Because of incomplete data, accents are not marked.

All systems are relatively similar, though not identical. A high percentage of terms have cognates for equivalent relations in all or most other languages. Certain general characteristics emerge from comparative analysis of the chart:

No distinction is made between male and female lines.

No distinction as to sex of speaker is made except in reciprocal affinal terms. (Distinction between man's and woman's grandchildren in Tuxtla is the only exception: these terms also are reciprocals.)

Relative age of the person designated is indicated by generations in relation to ego. Exceptions are the lumping of older siblings with older collateral relatives in Sierra, Texistepec, San Miguel, and Santa María, and lumping of younger siblings with younger collateral relatives in Sierra, Huitepec, and probably in Texistepec, San Miguel, and Santa María.

Collateral relatives, with the exceptions noted in the preceding paragraph, and with the probable exception of cousins classed with siblings in the remaining cases, are distinguished from lineal relatives.

Older relatives are distinguished as to sex; younger relatives usually are not, if the usual practice of distinguishing daughter from son by a special prefix is excluded.

A high degree of use of reciprocals for affinal relatives prevails. All groups

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2 Paul Radin, *Mexican Kinship Terms* (University of California Publications in American Archaeology and Ethnology, vol. 31, pp. 1-14, 1931), p. 7; C. Guiteras Holmes, *Sistema de parentesco huasteco* (Acta Americana, vol. 6, pp. 152-172, 1948), p. 153.

3 C. Guiteras Holmes, *Clanes y sistema de parentesco de Cancuc (México)* (Acta Americana, vol. 5, pp. 1-17), p. 8.

4 Ralph L. Beals, *Ethnology of the Western Mixe* (University of California Publications in American Archaeology and Ethnology, vol. 42, pp. 1-176, 1945), p. 39.

appear to make, or to have made use of until recently, reciprocals for a man's brother-in-law, a woman's sister-in-law, and siblings-in-law of the opposite sex. Reciprocals for parent-in-law/son-in-law, mother-in-law/daughter-in-law, and father-in-law/daughter-in-law also prevail, or apparently did so until recently.

Grandparent-grandchild reciprocals are common, though with certain confusing elements. The term ok or cognates, sometimes combined with other terms, usually is associated with female grandparents and with most grandchildren. In two cases it is restricted to granddaughter, while the form ap or derivatives is used for grandson. Ap or derivatives frequently is used for grandfather, though in Sierra and Texistepec Popoluca it forms a part of the terms for grandmother, and in Ayutla it is used for all grandchildren. Usually the grandparent adds the word "child" to the reciprocal stem when addressing a grandchild.

Reciprocals also exist for uncle-aunt and nephew-niece in Tuxtla Gutierrez, Copainalá, Ayutla, and apparently Huitepec. As in the frequent case of grandparent-grandchild reciprocals, the older relative adds the word "child" to the reciprocal stem.

Two early kinship terminologies, one Zoque and the other Mixe, throw additional light on the picture, and suggest that rather extensive changes in social organization have taken place in post-Conquest times. These are the Fray Luis Gonzales list of 1672[5] and the Augustín de Quintana list of 1733.[6] Both lists, including obvious errors of recording and/or printing in the Grasserie reproduction, but excluding such terms as godfather, are reproduced below. The order of terms has been altered to facilitate comparison.

Gonzales Zoque

1. A-puta	abuelo
2. Tahuata	abuelo de padre
3. Tua-puta	visabuelo a parte de padre
4. Tuta-haata	visabuela a parte de padre
5. Oco	abuelo a parte de madre
6. Tuoco	visabuelo a parte de madre
7. Aputa unc; oco unc	nieto
8. Aputa han; oco han	nieta
9. Tua-puta, mana	visnieto a parte de padre

5 Fray Luis Gonzales, *Arte breve y vocabulario de la langue zoque* (Published by Raoul de la Grasserie in *Langue Zoque et Langue Mixe*, Bibliothèque Linguistique Américaine, vol. 22, pp. 9-315, Paris, 1898), pp. 217-218.

6 Fray Augustín de Quintana, *Confessonario en lengua mixe* (Published by the Count de Charencey in Actes de la Société Philologique, vol. 28, pp. 185-335, Paris, 1890), pp. 271-273.

10. Tuha-haata une, Tuha-haata han	visnieta
11. Haata	padre
12. Mama	madre
13. Mana, une	hijo
14. Han	hija
15. Hatsi	hermano mayor
16. Cose	hermana mayor
17. Tza-tza	id.
18. Pootzo	hermano menor
19. Pootzo	hermana menor
20. Toeva	hermano ad invicem
21. Co-toeva	hermano de altero parente
22. Tzeni	tio ex padre
23. Hamo	tio ex madre
24. Paapo	tia ex padre
25. Eme	tia ex madre
26. Tzeniteva	primos hijos
27. Poopo-toeva	primos hijos de hermanos
28. Eme-toeva	primos hijos de hermanas
29. Itzeni-manac	sobrino ex parte fratris
30. Tzeni-han	sobrina ex parte fratris
31. Apu-manac	sobrino ex parte sororis
32. Apu-han	sobrina ex parte sororis
33. Poopo-manac	hijo del hermano (llama la hermana)
34. Poapahan	hija
35. Eme-manac	hijo de la hermana (llama la hermana)
36. Muent	suegro
37. Muent	yerno
38. Tzusi, chusi	suegro
39. Pissi	cuñado
40. Capay	hermana de mi mujer
41. Hoya	cuñada (soeur du mari)
42. Sep	mujer del tio
43. Sep-manac; Sep-han	hijos de su cuñada (llama la mujer)
44. Sep-manac	hijo de la cuñada
45. Sep-han	(llama la mujer) hija de la cuñada
46. Tzuu	cuñado de la madre

47. Tzuuma-nac	hijo de su cuñada (llama la mujer)
48. Tzuu-manac	hijo de lo cuñado
49. Tzun-han	hija de la cuñada
50. Maya	esposa, esposo
51. Vincotzec	sposos (fiancés)

Augustín de Quintana

De Consanguinidad

Primer Grado

1. Ap. vel Apteit	abuelo
2. Oc. vel Octaac	abuela
3. Teit	padre
4. Taac	madre
5. Vnc. vel Manc	hijo
6. Nôx	hija
7. Apvnc	nieto
8. Apvnc	nieta
9. Aich. vel Motuucqueex	hermano mayor
10. Vich. vel Motuucqueex	hermano menor
11. Tzôô vel Cotoix	hermana mayor
12. Vich. vel Cotoix	hermana menor

Segundo Grado

13. Tzucumteit	tio, hermano de padre
14. Haim	tio, hermano de madre
15. Tzucuu	tia, hermana de padre
16. Tzucuutaac	tia, hermana de madre
17. Aich.	primo hermano, mayor
18. Vich.	primo hermano, menor
19. Tzôô.	prima hermana, mayor
20. Vich.	prima hermana, menor
21. Tzocmanc	sobrino, hijo de hermano
22. Haim	sobrino, hijo de hermana
23. Tzocnôx	sobrina, hija de hermano
24. Haim	sobrina, hija de hermana

Tercero, y Quarto Grado

25. Apteit	tio

26. Octaac	tia
27. Aich.	primo, mayor
28. Vich.	primo, menor
29. Tzôô.	prima, mayor
30. Vich.	prima, menor
31. Ap. vel Apvnc.	sobrino, o sobrina

De Afinidad

32. Môôt	suegro
33. Môôt	suegra
34. Hôy	cuñado
35. Caip	cuñada
36. Môôt	yerno
37. Tzuu	nuera

Vocablos de que usan las mugeres, a distinción de los hombres

38. Ay	hermano mayor
39. Coyai	hermano menor
40. Ay	primo hermano, mayor
41. Coyai	primo hermano, menor
42. Ocvnc. vel Ocmanc	nieto
43. Ocnôx	nieta
44. Caip	cuñado
45. Noih	cuñada
46. Xôicx	suegra
47. Xôicx	nuera

It is apparent that the modern systems have become more simplified, assimilating in the direction of Spanish terminology. Moreover, since these lists were recorded from 150 to 200 years after the Conquest, it is logical to assume that the processes of change which are evident had been at work for some time. Hence, these lists cannot be considered as identical to the systems at the time of first contact, and any hypotheses derived from the comparative study of modern and 17-18th century data must be susceptible to projection backward to the 16th century.

Terms which have remained most constant since the time of the Gonzales-Quintana terminologies are those for grandparents, siblings, children, grandchildren, and affinal relatives. Those which appear to have changed most are for uncles, aunts, cousins, nephews, and nieces. The reciprocal characteristics of uncle-

aunt/nephew-niece terms, today limited to three or four cases, are common to both early systems. Two characteristics today, either absent or of limited use formerly, were common: indication of sex of speaker, and distinction between maternal and paternal lines. These characteristics appear in the following cases:

Zoque	*Mixe*
Sex of speaker indicated	
Brother's children (29, 30, 33, 34)	Older brother, male cousin (9, 27, 38, 40)
Sister's children (31, 32, 35)	Younger brother, male cousin (10, 18, 39, 41)
Various affinal relatives (40, 41, 43, 45, 47)	Grandchildren (7, 8, 42, 43)
(Apparently) grandchildren	Various affinal relatives (33, 34, 35, 37, 44, 45, 46, 47)
Paternal-maternal lines distinguished	
Father's parents and grandparents from mother's (1-6)	Father's siblings from mother's (13-16)
Father's siblings from mother's (22-25)	Brother's children from sister's (21-24)
Brother's children from sister's (29-32)	
(Possibly) grandchildren through male line	

Evidence for former more widespread distinctions as to sex of speaker is indicated by the numbers following each category. The rules governing affinal relatives are essentially those found today, so that the significant simplification has been loss of distinction between brother's and sister's children in Zoque, and older brothers and male cousins and younger brothers and male cousins, and grandchildren in Mixe. Former distinctions between paternal and maternal lines, where the evidence is certain, are likewise indicated by numbers following the categories.

The confused evidence that Zoque formerly distinguished maternal from paternal lines in ascending generations follows:

Oco (5) must certainly refer to the mother's father, and one may infer from this that a-puta (1) (cf. modern cognates appʌdu, apu, ap) refers to the father's father. Since no form is given for grandmother, probably the same terms served. Tuoco (6) appears to refer to a greatgrandparent through the mother, while both

Tahuata (2) and tua-puta (3) appear to refer to the greatgrandfather through the father. It is curious and inexplicable that a form for greatgrandmother through the father (tuta-haata, 4) should exist, since there are no terms for grandmother. This evidence, though far from conclusive, seems to indicate a distinction between the mother's and father's line. Terms which include the roots a-puta (modern variants and compounds, appʌdu, apu, ap) and haata (modern haˑtuŋ and variants) seem to be associated with the male line, while terms which include the root oco (modern ʔoko, ʔok, and variants and compounds) are associated with the female line.

In descending generations the corresponding evidence is, if possible, even more confused and less conclusive. The forms aputa unc and oco unc probably are misprints for aputa une and oco une (since une means "child" and unc appears in no other place), and hence are reciprocals for the grandparent terms, with the addition of the generic form for "child." However, one must note that among the modern Mixe branches "child" takes the form unk, with variants. Tua-puta, mana (9) would seem to be the reciprocal for tua-puta (3), to indicate greatgrandchildren through the male line, while tuha-haata une and tuha-haata han (10) correspond to tuta-haata (4) (is the h or t a misprint?), greatgrandchildren through the female line.

Eighteenth-century Mixe, however, does not distinguish ascending and descending lineal relatives, and the ap- and oc- roots as applied to grandchildren indicate sex of speaker. If seventeenth-century Zoque terms 7 and 8 are interpreted in this fashion, the correspondence is startling:

	Mixe		*Zoque*	
	Man	*Woman*	*Man*	*Woman*
Grandson	apvnc	ocvnc	aputa unc	oco unc
Granddaughter	apvnc	ocnôx	aputa han	oco han

Moreover, modern Tuxtla Gutierrez Zoque distinguishes between a man's grandchild, ʔaʧuʔuné, and a woman's grandchild, ʔokoʔuné. Hence, it looks as if Zoque terms 7 and 8 are best interpreted as indicating sex of speaker rather than male or female line, and the positive evidence for former Zoque distinction between paternal and maternal lineal descent is correspondingly weakened.

Possibly owing to Church influence and changes in marriage practice the original kinship systems lost much of their functional significance, and were accordingly simplified to the modern bilateral forms. Simplification in this way would explain why the modern roots ʔoko/ok and ʔap/apu sometimes are associated with male, and sometimes with female relatives. Presumably, as each kinship

system sloughed off non-functional terms and distinctions with little or no contact with other groups, the terms used in the male line (or by males?) sometimes came to predominate, and those used in the female line (or by females?) in other cases came to predominate. Thus, in San Miguel and Santa María (and Tuxtla Gutierrez, if ʔaʧu is accepted as a cognate of apu) some form of apu won out as the designation (or part of a compound) for grandfather, while ʔoko won out as the form for grandmother. Modern Mixe branches usually show this distinction, which already existed at the time of the Quintana grammar. In Sierra and Texistepec Popoluca ʔap became associated both with mother and grandmother. In Copainalá ʔoko won out as the term for both grandparents, an even further simplification. Some form or compound of ʔoko usually appears in the words for grandchildren, though in Santa María and Totontepec, ap is used for grandsons, and in Ayutla, for grandchildren in general.

A more difficult problem to resolve is the question of early preferential cousin marriage as suggested by the Gonzales Zoque terminology.

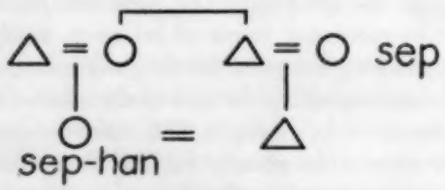
Examination of the terms of the modern systems used to express parent-in-law/children-in-law relationships reveals the use of three basic forms: cognates or equivalents of modern Tuxtla Gutierrez moʔut (parent-in-law/son-in-law reciprocal), sake (mother-in-law/daughter-in-law reciprocal), ʧusi (daughter-in-law/father-in-law reciprocal). Agreement among all groups with complete data is so high that it must be assumed that these terms were common to all languages at an early date, and that any form of social organization, particularly marriage, reflected by them very likely characterized all groups.

This fact is significant when considered in relation to the rather complete but very carelessly printed (recorded?) list of Gonzales. Gonzales lists the form muent for father-in-law (presumably parents-in-law, man speaking) and son-in-law (presumably either sex speaking). The form tzusi/chusi for father-in-law (suegro), in the above-mentioned frame of reference, surely refers to woman speaking. Completely lacking are terms for daughter-in-law, either sex speaking, and mother-in-law, woman speaking. In view of the relative completeness of the list, this would not appear to be oversight. This raises the question as to whether relations covered by other terms actually fulfilled these sociological places, i.e., are uncles, aunts, nephews, nieces involved?

The complete uncle-aunt/nephew-niece class terminology accounts for mother's and father's brothers and sisters, apparently regardless of sex of speaker. Terms 29-32, referring to nephews and nieces, appear to have been for males. By inference a woman used terms different from those of a man to address nephews and nieces, 33-35. (This is specifically stated for two of the four rela-

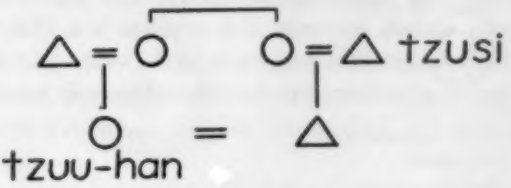
tionships, poopo-manac and eme-manac, while in a third, poapahan, it is obvious that through carelessness "hija del hermano, llama la hermana," has been shortened to "hija," which means nothing. It is logical to assume that eme-han, not given, would be the complementary form to eme-manac, 35, to complete the series "children of the sister, woman speaking," though it is also possible that the one term served for any children of a woman's sister). Parallel-cousins through sisters are clearly identified, eme-toeva (28) (eme "mother's sister," toeva "sibling".) The term tzeniteva (26) apparently refers to parallel-cousins through brothers (since tzeni is the father's brother). By elimination poopa-toeva would appear to refer to cross-cousins, the term hermanos in this case meaning brothers and sisters (since paapa is a cross-aunt).

Terminology to this point, for parent's siblings, cousins, and siblings' children, is logical and consistent. The puzzling aspect is the inclusion in the list of various terms, apparently selected at random: children of certain siblings-in-law, the wife of the uncle, and the brother-in-law of the mother. These are in all cases compounds of sep and tzuu. If, for the sake of argument, these are considered as cognates of seks/šreksi¢/soky/saki, and ¢u?u/¢usi/¢ut/ću?u (and that Gonzales Zoque tzusi/chusi, 38, "suegro" is the same root as Tzuu, 46, in the same list), the picture becomes more meaningful. The missing term for woman's mother-in-law is sep (42), the "uncle's wife," either the mother's or father's brother's wife. The corresponding reciprocal term for woman's daughter-in-law is sep-han (han "daughter," 45), daughter of a woman's sister-in-law. Logically this would be a woman's husband's sister, since the other alternative, brother's wife, would be more easily expressed simply as brother's daughter (see the following diagram). Moreover, there is already the term poopo-manac (37) for brother's daughter.



If it be granted that, on the basis of comparative evidence from all groups, the Gonzales Zoque tzusi/chusi (38) actually refers to the girl's father-in-law, and that the term is the same as tzuu (46), then the girl's father-in-law is her mother's brother-in-law. This must refer to the mother's sister's husband, since if the husband's sister were meant, it would seem simpler to refer to the man

as the father's brother. A man's daughter-in-law is the reciprocal tzuu-han (49), daughter of the sister-in-law. This must mean wife's sister, since otherwise it would be simpler to say brother's daughter for which, moreover, there is already a term, tzeni-han (30) (as in the following diagram).



Examination of the two diagrams shows that sep points to possible cross-cousin marriage, while tzuu points to possible parallel-cousin marriage between children of sisters. Perhaps the data should be interpreted to mean that a man could marry the daughter of his mother's or father's sister (or female cousin). This permits the possibility of patrilineal exogamous clans (if the mother's sister were not married to a member of the father's clan). This supposition is strengthened by the presence of patrilineal clans among the neighboring Maya-speaking Tzeltal, whose kinship system is strikingly similar to that of the Mixe-Zoque groups.[7] Moreover, there is strong presumptive evidence for former unilateral organization, with cross-cousin or brother-sister exchange marriage, among the Huastec.[8] The Tzeltal of Cancuc have, in addition to their Spanish surnames, indigenous surnames which indicate their clan affiliation. Elson recently has pointed out the same thing for the Sierra Popoluca.[9] These surnames, some of which mean such things as horn, star, turtle, a species of tree, and so forth, tempt one to think that perhaps they are former clan names which have survived long after formal organization and terminology have been forgotten. Corroborating evidence is found in statements of the author's informants that formerly people did not marry within the same name group, regardless of actual blood relationship.

SUMMARY

Evidence is presented showing a rather high degree of kinship terminology uniformity among present-day Mixe-Zoque groups. It is clear that these systems have changed considerably within historic times, primarily in the direction of

7 Guiteras Holmes, *Clanes y sistema de parentesco de Cancuc (México)*, p. 1.

8 *Idem*, pp. 166-171.

9 Ben Elson, *Sierra Popoluca Personal Names* (International Journal of American Linguistics, vol. 14, pp. 191-193, 1948).

simplification by eliminating the distinctions between paternal and maternal lines, and distinctions based on the sex of the speaker. It seems quite probable that some or all of these groups formerly were characterized by unilateral kinship groupings, possibly patrilineal clans, as in the case of the modern Tzeltal. Some form of cousin-marriage, real or classificatory, may well have existed. The Church interdiction against marriage with relatives is a likely explanation of the breakdown of the unilateral organization, and makes unnecessary the former more elaborate system as compared to the relatively simple systems of today.

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THE CONCEPTS BEHIND THE AINU BEAR FESTIVAL (KUMAMATSURI)[1]

KYŌSUKE KINDAICHI:
TRANSLATED BY MINORI YOSHIDA[2]

IN THE AINU LANGUAGE the bear is called kamui, which means a god. Not only a bear, but almost all living things such as a wolf, deer, fox, hare, owl, crow, woodpecker, whale, dolphin, shark, frog, a bird, a beast, an insect, and a fish, are gods.

A bear is particularly one of the gods of mountains (kimun-kamui), but he is head of the gods (sabane-kamui), and also he is the most careful god, who is called Chira-Mante-Kamui. But usually kamui, a god, means a bear.

Outside of this world, where men are living, there is a country of gods, where the gods, it is thought, live in human form, build houses and make fireplaces in the center of the room; and it is thought that the head of the god's family sits on the right hand of the fireplace and the guest on the left, just as is man's custom.

These gods sometimes come to this world of men to play, where the god, a bear, comes in a disguise of black fur, sharp claws, and a big form; the wolf, a god named Horokeu-Kamui, comes in a white robe; the fox, a god named Chiron-Nubu-Kamui comes in a yellowish-brown disguise; others in disguise of birds, or of insects, or of fish. These forms of living things are nothing but the disguise in which those gods visit this world.

The hunting deity is always a beautiful young goddess in the kingdom of gods, but she comes to this world in the disguise of a small bird, such as a Japan-jay. The "flowers" offered to this god always consist of a twig, which is meant for a perch for her.

Nusaburo-Kamui, who is the god of land and agriculture, appears in the form of a snake, which is the disguise of this god. The deity of water is still more strange, for the Ainu believe that the small long worms such as earthworms, which live in the mountain rivers, are the deities of water. But, in the kingdom of gods, the latter is a very beautiful goddess; and in the god's song which begins Inusa-Inusa, she dances for human beings to calm down the angry fish gods.

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1 Translated from an article of slightly differing title in Gakusō Zuihitsu [Essays of a School Window], Jinbun Shoin: Kyoto, 1936. The translation was secured by Charles Redfield in connection with his study of the Ainu.

2 Respectively Professor in Tokyo University, a famous Ainu scholar, and Professor at the Hokkaido First Normal School, Sapporo.

Not only the animal forms, but also grasses and trees are gods: the corn and the lily-bulb, for example, are gods, called haru-kamui, which means "food gods." In olden days, when the Ainu tribe did not know that the lily-bulb was edible, it rotted vainly in the fields and the spirit of the lily or the god of the lily wandered upon this earth in the disguise of a traveller who visited every house and ate the lily-bulb himself, taking off his head and boiling it in a pot for his food.

Among the Ainu people (who feared to eat the lily-bulb) there was a man who was brave enough to eat one; he found that it had a fine taste, and all the others became willing to eat it. After that, the god of the lily-bulb was able to return to his kingdom of gods, without wandering in vain upon the earth.

Thus, the gods who came to this world can return happily to the kingdom of gods, only by being freed of their hayokube (or willingly eaten and being respected) at the hands of the Ainu tribe.

Therefore, the flesh and the skin of the bear, of the owl, or the salmon, which are their disguises, are given to the Ainu who catch them; and the Ainu receive them and eat them in thankfulness. Thus, the gods, who came down to the earth to play, can go home to the kingdom of gods.

According to Ainu belief, the earth is as beautiful as the kingdom of gods; that is, it is the cradle of the gods or the prospering land, where the gods come down to this earth when they bear a child.

The human beings are as great as the gods; sometimes men possess excellent treasures of which the gods are envious. Gods look at men with envious eyes, and they want to compromise with men, and they warn each other to be on good terms with men. They want to be well thought of by human beings, showing their good will to them.

Gods can gain esteem in the kingdom of the gods by being well thought of or by being respected by men, because when people think well of them they will often hold festivals, offer wine, and make offerings to the gods. These offerings, it is said, will be many fold when they reach the kingdom of the gods, where the gods can invite their neighbors to their houses to eat. On the contrary, the gods who are not well thought of by men and who are given no festivals, are miserable, for they are short of money and very poor in their country.

According to one view, kamui, god, means "those who cover," which means the supreme existence, but usually kamui does not mean such a great thing; this world being the house both for men and gods. That is to say, men and gods are dependent upon each other, but are of opposing existence.

The words "to pray gods" mean in the Ainu language "to ask gods"; really

they ask gods just as we ask the doctor, as we ask the gardener, the plasterer, the shampooer, or the fortune-teller. The words never mean to depend upon the great spiritual existence. The word "pray" often means "to sophisticate," "to flatter," "to instigate," or even "to coax." Sometimes it means "to negotiate," "to demand," or "to behave like a spoiled child."

However, at the time of natural calamities or other terrible disasters, they ask the gods' help in trembling; and sometimes they piously pray to the ancestral gods. There is little difference between men and gods; and moreover, men are even thought to be greater than gods. For instance, Okikurumi, who is thought to be the forefather of the Ainu tribe, is greater than the gods.

We can find this fact in many stories: for instance, the story of the recovery of the house god, who is the husband of the fire god, from the devil, or the story of recovering the land by killing the great specter of a trout, or the story of extinguishing the great fire of the mountain of precious stones by Hidaka-Ainu in coöperation with the great devil.

The kingdom of gods is usually thought to be in the heaven, but the sources of the Saru River and the mountains which are the backbone of Hokkaido are in the clouds, which are part of the kingdom of the gods. The head of the bear gods is called Nupuri-Koro-Kamui, "the god of the mountains"; and he lives there.

But the kingdom of sea-gods seems to be in the bottom of the sea. Far beyond the sea, there is Atoi-Shinbui, which means "the sea-well," between this world and the foreign land, and there is a road of sand there. And if we go along the road we can reach the land of the sea-gods, where we can find the houses of sea-gods just as the village houses of this land.

Besides these, there are gods who go round the world throughout the year; these gods are called Pokoro-Kamui, "the year god," who comes always from the sea-kingdom.

Whether the year is good or bad depends upon the kind of gods who come to this land. When they come to this land from the sea kingdom, they come on numberless ships, though invisible, which cover the surface of the sea; and it is said that they come rowing the boats, clothed in suits with red dots.

Those who died of fever, it is said, are going round through the country, accompanied by the gods, for three years, during which time people do not hold the funeral ceremony. The plague-god is also called Pacoro-Kamui.

These gods of another world come to this land in the disguise of various kinds of living things; and when they are caught and killed at the hands of the Ainu people, their spirits come in the house, not through the usual doors, but through

the inner window, and sit at the left side of the fire-place, which is usually the seat of guests. This window is called kamui-kushabu-yara, "the window through which the gods enter." The visitor-spirit is a present to man, if it is seen from the point of view of the Ainu; but it is a guest as seen from the point of view of the gods.

When, thus, gods visit the house of the Ainu, the disguise (or meat and fur) is a complimentary gift to the people of the house. Then they hold a banquet, calling the people of their neighborhood and eating this "souvenir" of the gods all together. It is called "to give a banquet" if it is seen from the viewpoint of men, but it means "an entertainment" as seen from that of the gods.

The offering means "giving" from the men's side, but it means "being given" if it is seen from gods' side. It is thought that the spirits bring the offering to the land of the gods. When they reach there the offering becomes six-fold (or many fold or many ten-fold); for example, when a cup of wine reaches there it will become a cask of wine, when a cask of wine reaches there it will become six casks of wine.

Therefore, when the gods return to their land, they can invite the gods of their neighborhood to the banquet, telling them with pride that they went to the land of men and brought home the souvenir. This belief is told among the Ainu people, and also described in various songs.

When men bring home such game as a bear or a deer, it is the god's visit to their home; and it means entirely the welcome of a guest, his entertainment, and send-off.

It is surprising that there is a great difference between the mind of the Ainu and ours [Japanese] when game was caught. When a deer or a bear was caught they say in the Ainu language "shumau-an"; "an" means "there is" and "shumau" means that "a god returns to his former self by being killed by the hand of men." It does not mean death, but a new life in the form of a god.

When a living thing is killed by men, its skull is decorated with flowers and the skull is called Riwak-Kamui, "returning god." After killing a creature, they make an offering to its spirit and say, "Go thou home to thy fatherland with the souvenir." This is called "sending off," of which there are many expressions such as "to let go" or "to dispatch" or "to let depart." The word Kumamatsuri, "the bear festival," is Iomante in Ainu language, which means "sending off."

When they catch a bear or a deer in the mountains and eat the meat with the people at home to send the spirit away with civility, this is called Omante. But when they catch a bear cub and rear him to be big enough, and hold a great

ceremony with extreme civility in order to kill him and send him off, inviting many people, this is especially called Iomante or Kumamatsuri.

Therefore the account of Kumamatsuri begins with rearing a bear cub. When a young bear is found in the mountains, the Ainu catches him alive without fail, and rears him in a cage made of logs beside the residence. According to the Ainu way, they bring him up; they do not simply feed him as we do, for he is a god. As if he is a child given to men from the god of the mountains, they give him the same food as men's and serve him on a carved platter with respect. This is called reshi-yu, which means to "bring up" or "to treat." They feed the animal with as much affection as if they were bringing up an orphan, but they take care of it much more than of their own children, for it is a guest, and they are taking care of the god who called on them until he is grown up.

Therefore, if it is a bear so young that it has no teeth, a woman who has a baby will suckle it with her own breast on her knees. Then it is called hepere, "the very young." Usually it will so pass the year, and when it is two or three years old, the Kumamatsuri is held in midwinter (when the fur is thickest and the meat is sweetest with fat). At the bear festival, the guests are invited, the altar is decorated with offerings, and wine is prepared; and the bear is taken out of the cage with a rope, to the open space between the altar and the gods' window.

A number of villagers shoot it with a ceremonial arrow at first, and then kill it with ordinary arrows (in some districts they crush it to death under a big log). After that, they place it before the altar and make an abundance of offerings to it, dancing before it. The host pours wine on it and says the words of "sending off." The festivity is kept up three days and three nights. On the first night at the left seat of the fireplace, a secret ceremony called Keo-Mante, which means "sending the dead body off," is solemnly held by taking the brains, the tongue, and the eyeballs out of the skull and filling it with flowers.

No woman can take part in this ceremony, which is held at midnight, when the spirit of the bear goes up, as it is supposed, to heaven. On the second day, which is called Poro-Ome-Kabu, "the great feast," they eat the meat all together. On the third day, which is called Bon-Ome-Kabu, the small feast is held.

Hitherto, this ceremony has usually been understood by the Japanese to mean that the Ainu kills the bear in order to worship the god of heaven. Or, according to other authorities, the ceremony was held to comfort the bear family as they kill the child bear.

In Ainu belief, there is no god greater than the bear, therefore it is impossible

to suppose that they offer it as a sacrifice to a greater god. Killing a bear is a sacred act, by which they let him return to his home as a god: it is really an act for which the bear should be thankful. The Ainu has no idea of apologizing to a bear which is killed. It is the same idea as treating a guest.

In the past, the true meaning of Kumamatsuri has not been realized, being superficially explained as above-mentioned.

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ANTHROPOLOGICAL ANALYSIS OF SHARED RESPECT: CONTRIBUTIONS TO A STUDY OF REVOLUTION

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I. INTRODUCTION

THE WRITER would like to bring to the attention of his anthropological colleagues and other human scientists a very profitable kind of coöperative experience, in which he is participating as anthropological consultant. The project, namely, a study of Revolution and the Development of International Relations (RADIR) was made possible by a several years' grant to the Hoover Institute at Stanford University, by the Carnegie Foundation. A number of specialists in various fields—history, political science, psychology, sociology, and anthropology—have been invited to assist in defining programmatic research and to sharpen conceptual and methodological tools of analysis. The writer first became interested in the project as an anthropologist because of the little systematic formulation of problems in this critical area of cultural dynamics by members of his profession. Preoccupation with non-literate societies, isolated from the mainstream of rapid change, contributed no little to the serious gaps in our knowledge of these phenomena. Even in the study of acculturation problems, anthropologists have tended to confine their energies largely to the analysis of *orderly* change. They have directed their clearest conceptual formulations toward the study of process, in which change without social or personal disorganization became an assumed value, an attitude particularly marked among those trained in the Malinowskian functionalist tradition.

There can be no quarrel with such a premise, provided the analyst makes explicit the limited areas of understanding to which points of departure, so conceived, can contribute. Thus the question, either assumed or explicitly stated, of primary interest to many investigators, may be stated as follows:

"Under conditions of long-range culture contact between peoples of diverse traditional backgrounds, how can we control the introduction and operation of elements of western European culture in ways that will be least disturbing to the existing native value-attitude systems and the organization of social relationships by which they have been aboriginally supported?" What if we should adopt a conflicting value assumption, namely, that the cultures of many dependent peoples would benefit most from revolutionary change—in the sense of sudden shifts in composition of ruling groups or of profound changes in the character of social interaction? Or, suppose we omit judgments of this sort as points of

departure, and elect to study the natural history of social systems. Certainly one of the significant emergent problems would be the impact of "the revolution of our time" upon cultures buffeting its spread over the past hundred and fifty years. By "revolution" in this sense we mean the changes effected by the discovery of new sources of power, the rise of capitalism and of "democracy" in socio-political relations, in short, the growth of contemporary social systems in western Europe and America.

Under the direction of Dr Harold Fisher and Dr Easton Rothwell, and with important contributions by Dr Harold Lasswell, RADIR has set up as one of its aims the analysis of a social science problem, designed to contribute in some measure to our understanding of the processes of such change. It involves the following steps: (1) postulating and defining of three primary goal values of Western civilization, and their interdependence; (2) isolating of two conditioning variables, and stipulating of their functional relations with the goal-values; (3) measurement through a time-space field from 1890 to 1950 of the changes in the incidence of occurrence of these goal-values; and (4) testing of propositions bearing upon the interplay of these variables by data secured by content analysis of pertinent comparable sources.

For the goal-values Lasswell suggested what he terms "security," "democracy" (shared power), and "fraternity" (shared respect). The conditioning variables stipulated are tempo (rate of technological change) and balance (nature of the class structure).

This paper is not concerned with the whys and wherefores by which the particular goal values were selected or the resulting problems formulated. Many conferences over a considerable period of time preceded actual agreement by participating members of the project on aims and methodological procedures. Once these major decisions were reached, however, the first step obviously consisted of clarification of concepts employed, so as to make them amenable to comparative analysis by country or region. To put the matter in more anthropological terms, it was desired to undertake a cross-cultural study of the diffusion of three important components of Euro-American value systems over a period of the last sixty years. The writer assumed responsibility for a detailed analysis of the shared respect concept. This he designed in such a way as to suggest the most significant kinds of indices for measuring the presence or absence, in "key" cultures, of a species of inter-personal conduct denoted by that term. The remainder of this paper will be devoted to the results obtained at this phase in the development of the project. It is therefore in the nature of a progress report on an important methodological problem.

II. DEFINITIONS AND CLARIFICATION OF THE CONCEPT OF SHARED RESPECT

1. Shared respect exists to the extent that all individuals in a society have equal access to the valued statuses of a society. It may be said to vary inversely with the number of group barriers to social intercourse, i.e., to the frequency of discriminations. Affirmatively, we can measure shared respect by the number of alternative modes of action open to individuals for the development of native or learned predispositions. In brief, our problem is to discover the extent to which individuals can achieve, or are prevented from achieving, assignments of respect (prestige) through their own efforts. As a further qualifying statement we shall stipulate that this emphasis on respect for the individual embraces specific considerations for the fullest possible aid and development for the physically or mentally handicapped or other dependent persons.

2. When applied in the outline below (Section IV) to the measurement of social participation, the terms *discrimination* and *alternatives* have special meanings, which we shall attempt to clarify at the outset.

By discrimination we mean: (1) the erecting of barriers to membership in desired groups or participation in any desired activity (activities) when applied to certain specified categories of individuals and not to others, and (2) the multiplication and fixity of group controls, such that participation in the status system is largely ascribed (not open to achievement through merit). Condition 2 of this definition makes explicit the fact that discrimination shall apply to those situations in which a society *as a whole* tends to be organized largely around the ascription of status, so that all or most of its members—not just a restricted category (or categories)—lack the element of choice in participating in desired activities. Thus assignments of respect are caught up in a network of mutual obligation-privilege relationships (viz. kinship), learned by individuals as a result of birth, birth order, or the gradual and automatic attainment of changing states (advancing age). Societies which share this tendency range geographically over a large arc of the world's surface (including large chunks of Far Eastern and Southeastern Asia, India, the Middle and Near East, Africa, and Latin America), and encompass a vast portion of its total population. The fulfillment of either of the conditions specified will impose serious limitations on the satisfactions of wants and desires as conceived by the individual within the value system of the culture in which he participates.

Following Linton, we shall designate as alternatives those culture traits known to all the normal adult members of a society, with respect to which the individual

may exercise choice in meeting situations.[1] They represent different action ways of responding to the same situations. There are two sides to this coin, however. While all adults theoretically have access to alternatives, only certain individuals may actually share a certain number of them. Thus anyone might elect one of several available modes of transportation or of entertainment. On the other hand, once having prepared for an occupation from many available choices, he will share the practice of it with a restricted number of individuals.[2]

The statement, "traits shared by certain individuals but not common to all members of the society," does not exclude conditions of shared respect, but frequently refers to the end-results of different training programs open to the individual on the basis of achievement by merit, and to a multiplicity of roughly equivalent valued statuses. Shared respect may also be said to prevail even when positions are not equal, strictly speaking, as regards the socially calibrated rating of activities, as long as the individual possesses a broad measure of choice among culturally allowed action patterns. Thus, of the medical and teaching professions in the United States, the former will almost invariably outrank the latter in prestige value. Yet an individual confronted with these alternatives might freely elect teaching, even though he had equal access to training for the former.

Alternatives are present in all societies, but in increasing proportion as one moves from status to contract type societies, to use Henry Maine's dichotomy. As hypothesis we may state that the complexity of the socio-cultural environment is a necessary but not sufficient condition for the indulgence of individual predispositions. With increasing differentiation and specialization of activities, the individual may be expected to exercise greater choice in the acquisition and practice of skills and talents. Moreover, the necessary conditions for technological and societal complexity bring in their wake a proliferation of interest activities, political, religious, recreational, etc., within certain groups, commonly referred to as associations.

Shared respect does not imply a necessarily greater degree of well-being or happiness (however these might be measured) but rather opportunities for seeking

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1 Ralph Linton, *The Study of Man* (New York, 1936), Chapter 16.

2 Dr Robert Redfield and Dr Sol Tax have suggested that these two aspects of the concept be differentiated, because the latter does not involve the element of repetitive choice, but rather variant, albeit equally valued, modes of meeting certain situations conventionally shared among different aggregates of individuals. They have suggested the retention of the term, Alternatives, for the former, and the substitution of Variants for the latter. Inasmuch as we are concerned here with the psychological factors of free choice and multiple opportunities, as perceived by the individual, we shall continue to subsume both under the concept of Alternatives (see R. Redfield, *The Folk Culture of Yucatan*, Chicago, 1941, p. 347).

outlets to individual ends through collective activities most often in the form of associations, other than, e.g., those prescribed by one's position in the family unit. The concept is defined basically, thus, in social rather than psychological terms. One theory of associations most pertinent to this analysis[3] brings an impressive body of data to bear on the proposition that, where habitual relationships between individuals become disrupted or disturbed, the latter may compensate by joining associations in which they carry on relationships with persons who have in common with them interests in a third person or technique. A simple example, cited from our society, is the parent-teacher association. Parents and teachers in this case have a common interest in (are commonly related to) the school child. When the child experiences disturbances at school they affect his home relationships, and vice versa. The Parent-Teacher Association acts here as a compensatory mechanism for the disturbed relationships.

Labor unions constitute another example. As the functions of management and labor become more and more exclusive and distinct, resulting disturbances in the relationships between these groups created inequities by allowing management special advantage for exploitation. The development of union associations again provided alternative outlets for relieving these tensions among individuals with similar interests regarding relations with a common management group.

The incidence of associations, so conceived, is thus directly correlated with the incidence of alternatives in a culture. It is desirable to keep these two constructs separate, however, for alternatives consist of activities, while associations constitute groups, or alternative collectivities.

In brief, alternatives give scope and substance to the problem of individual choice, where moral considerations are not at stake. It is important to know the historical and functional conditions within which choice can operate (the institutional framework and ideological demands for or against the element of choice). But we can ignore these broader considerations for our purposes, and qualify or quantify the positive aspect of shared respect, especially the degree of shift toward it or away from it over a given time interval.

3. It should be clear that our general framework is oriented in the direction of identifying certain relevant aspects of *social relations*. Nevertheless, it also assumes significant changes in the shared value-attitude system of a society underlying these relations. That is, we should expect that a meaningful recorded shift in overt relations, from less to more freedom of participation in valued activities, would reflect some degree of corresponding change in the value-attitude system.

3 Elliot Chapple and Carleton Coon, *Principles of Anthropology* (New York, 1942), Chapter 17 (taken from the doctoral dissertation of E. Chapple).

However, neither that system, nor the extent to which shared respect itself is a part of it, explicitly enter into our conceptual point of departure.

4. Shared respect is the goal-value linked most conspicuously to the process of individualism in the history of Western civilization, especially with the goal ideal of the free commonwealth. It is present in some degree in all social systems, at least in overt behavior. There is no society in which individuals do not possess some measure of choice in behavior. In only one instance, however, namely in the growth of Western civilization, has the theme of human dignity and man's respect for his fellow man been lifted out and emphasized as a special goal value. Consequently, we are really following the diffusion from culture centers of Western society of the following compounded shifts in social relations: from familism to individualism; from caste or estate to open status (social status mobility); from unilateral domination by the members of one age-sex category to equilateral access to prestige statuses; from unilocalism and ethnocentrism to universalism; in short, to a set of conditions of societal life where every barrier is gone, except what people think of one another. We may describe these shifts in general terms as trends from *socio-statism* to individualism. By socio-statism we mean the automatic determination of status, and one's concomitant opportunities or restriction to same, by the accident of birth in a social group or social segment, or by maturation. Socio-static societies are those characterized by a preponderance of positions so determined for the individual.

In terms of our analysis, the process outline above follows more generally the course of societal complexity—the increasing segmentation of social groups and institutions, and continuously shifting and expanding numbers of interrelationships among the component individuals. This is part of what we mean by individualism. Another feature of individualism consists in freedom from restraints and freedom to engage, as a result, in any one of various necessary or desired activities, such lack of restraint to be consistent with the minimum needs of organized social life. The effect on the relationship between the person and group life consists in making a wider identification of the self beyond the family or most intimate, frequent, and sympathetic relationships.[4] Thus Redfield states of a Yucatecan community,

4 As Erich Fromm has pointed out in *Escape from Freedom* (New York, 1941), freedom in this sense contains the germs of intense feelings of insecurity. The individual caught in the middle of such a dilemma often tends to renounce the freedom of the self, and impose severe restrictions upon the development of its potentialities, by the mechanism of automatic conformity. Hence we must qualify our conception of freedom so as to refer only to the liberation of the individual from a tight network of ascribed statuses, or positions within a society, thus making him a relatively free agent as regards access to alternative modes of participation in the value-

When a native takes half a cent from a neighbor in exchange for an egg, and asks an outsider fifteen cents for the same, he is not so much, in either case, trying to consummate an exchange which will accrue to his advantage as he is in the one case expressing his good will and in the other his ill will or at least his lack of sympathy and confidence.[5] [Or again:] The principal differences . . . [between a strong and weakened family organization] have to do not with their form but with their relative stability and with the definition and importance of the rights and responsibilities recognized to exist among "kindred."[6]

III. METHOD OF ANALYZING SHARED RESPECT

1. In accordance with the negative and positive aspects of shared respect, we can indicate two kinds of operational indices for measuring the degree of assignments of respect over a period of time: those qualifying and quantifying the kinds and numbers of group *discrimination*, and those depicting the number and increase of cultural *alternatives*. Collectively, discrimination and alternatives will be contained under the general heading of social participation.

So as to make the data amenable to cross-cultural analysis, we shall postulate what appear to be six of the most universally recurring factors, which we shall label *bio-social attributes*, in terms of which social relations are organized and the functions of individuals defined and delimited (principles of social structure): *sex differences, age differences, kinship relations* (actual and putative), *locality, ethnic origins*, and *stratification*.[7] We can also speak of these as the most immediate and highly visible characteristics—what Linton calls the raw materials—of all societies, as perceived by their constituent members. They serve, consequently, as points of reference for the structuring of social relations, and are the foci at which individuals can be deprived of shared respect, either imposing such deprivations upon themselves and others, or having them imposed from without; or by the same token, can achieve shared respect.

Of these six characters, sex, age, and kinship are self-evident. Locality refers to regional identifications and distinctions; ethnic origins, to real or assumed racial and cultural (including religious) differences; and stratification, to distinctions as a result of social status, prestige status, and politico-economic class.

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attitude system. For our purposes we can disregard the psychological effects of these conditions. That they may be socially undesirable as well, is manifest in objective indexes of, e.g., high incidence of divorce and desertions.

5 Redfield, *Folk Culture of Yucatan*, p. 183.

6 *Idem*, p. 189.

7 The phrase, bio-social attributes, was coined to suggest the derivation of the designated factors partly from biological (and physical) foundations of society, partly from the differentiation of social functions.

For our purposes it is unnecessary to suggest probable correlations between the environment, level of technological complexity, and institutionalized practices, with the several principles mentioned. To take western Ireland, for example, it is sufficient to point out the dominant-submissive relation of the active father towards his unmarried sons, though the latter may be past middle age.[8] We need not explain this phenomenon by relating it to the stem family, particular techniques of farming, and the inadvisability of further land division. Psychologically, the relationship represents an extension of the child dependency role under culturally standardized conditions.

Finally, we may construct, for purposes of operational convenience, the *loci of respect,* that is, significant classes of activities for the measurement of social participation (shared respect). These activities, in turn, represent distillations, so to speak, from a very large number of more or less unique patterns of thought and behavior among widely divergent societies.[9] From the examples of social participation given, it will be seen that the criteria of selection permit reading across from one of the bio-social factors to all of the others. That is, "Acquisition of skills and talents," "Practice of skills and talents," "Occupational functions," etc., occur for each, and in the same order, as important forms of activities.

2. Some justification should be made for equating locus of respect with activities, rather than with social groups. This procedure seemed more feasible, because not all forms of social participation are actualized in structured groups. In varying degrees it occurs within aggregates, or unstructured units. This pertains, for example, to freedom of movement and to such mass acts as lynching. For the same reason we do not specify institutions as the loci of respect (even if they be so in the great majority of cases), because the culture screen *as a whole* is not composed of *clusters* of folkways and mores related to specific needs and activities.

At this juncture it might be well to present a few illustrations to depict how this schematization works in practice. (a) The statement of preference for the United States dollar or pounds sterling to Mexican money on the part of isolated Mexican-Indian peasants is a form of discrimination with regard to locality and ethnic-origins, having its locus in symbolic status reference (see outline). Even groups that possess a minimum of formal political (locality) organization normally make distinctions between themselves as a local group and others. This may take the form of discrimination, e.g., in the treatment of delicts and in

8 Conrad M. Arensberg and Solon T. Kimball, *Family and Community in Ireland* (Cambridge, Mass., 1940).

9 The Yale *Outline of Cultural Materials* (revised edition, 1945) provided a useful guide for this selection.

commodity exchange. (b) The payment of different wages for the same job, given equal skills and talents, is a form of discrimination which may be with regard to any of the six isolates, having its locus in labor relations. (c) The formation in modern China of an increasing number of youth organizations,[10] creates alternatives with regard to sex and age (indicative of decreasing control of the old over the young and of women by men), having its locus in movement, social control, and interest activities. (d) Child labor is a form of discrimination (involving disrespect for the rights of children) with regard to age, having its locus in labor relations and social control. We must qualify this statement by introducing the factor of context, inasmuch as the employment of children by their parents for labor in the fields in agricultural societies does not necessarily constitute a negative instance of shared respect. Such work (1) is not especially injurious to their health or physical development, and (2) it normally prepares them for expected and prestigeful adult functions. Finally, (e) recruitment of the ruling elite almost exclusively from urban centers, or predominantly from one region in a larger nation, we should consider a form of discrimination with respect to locality, having its locus in political leadership and distribution of political power. Since shared respect varies inversely with the strength of in-group sentiments and practices, one of its indices, with respect to locality, would be the number of skirmishes and *symbolic distinctions* (e.g., language, dress) deliberately maintained between communities.[11]

3. Methodologically two points of departure suggest themselves in our analysis of social participation. By the first we should utilize ideal type constructs, which mark off a continuum ranging through different points on a line from rigid discrimination, on the one hand, to unlimited alternative modes of action, on the other. There exist no societies, in fact, in which the element of individual choice is completely lacking. Nor, by the same token, are there any societies which stipulate no barriers to individual action on the basis of group affiliation. All will tend to fall somewhere in between the end points along the line of participation. Therefore, if we followed this procedure, it would be expedient to develop a scale, subject to tests of reliability, on which types of statements could be ranged along various points of the continuum.

The other procedure consists of recording shifts toward or away from shared respect over a specified period of time from a given point in the past. Here we are interested, not so much in the different degrees in the incidence of a mode

10 See Olga Lang, *The Chinese Family and Society* (New Haven, 1946), Chapter 20.

11 See reference to these symbolic distinctions in a Guatemalan village (Sol Tax, *World View and Social Relations in Gautemala*, American Anthropologist, vol. 43, 1941, p. 28).

of behavior, as in the trends with regard to it over the same time span in various key regions of the world.

Constructing a suitable and acceptable rating scale, as part of the former approach, would entail difficulties and an expenditure of time out of proportion to the scope of the larger project. Hence the second departure seemed more expedient for the purposes of the present study.

4. Acts and symbols to be culled under the indices of respect will also be systematized in terms of demands (theories or ideas about behavior in a given situation as stated by the society's members), and expectations (based on actual practice) as seen by the observer. Where dealing with institutionalized behavior we can speak of these as the myth, or charter, of the institution and its translation into behavioral effects, respectively. The consistency, or lack of it, between these two factors will bear upon propositions about their relationship as a function of rate of change (tempo), as well as upon correct evaluations of the effective roles of shared respect in the culture. Thus the myth of the patriarchal family states that the male head shall have great (even absolute) powers over all the members of his household. In fact, however, this may vary with the personality of the wife. She may rule the roost if not the community. Redfield has pointed out that in Mexico social doctrine stipulates that no man shall be deprived because he is an Indian or descendant of an Indian. Yet in social practice distinctions are made between the Indio and Vecino (person with Spanish surname). In communities where the process of individualization has begun to be felt, however, the distinction is not recognized in public organs or institutions.[12]

5. Inasmuch as the same acts in different settings may have quite different meanings, or, by the same token, different acts represent overt patterns of the same underlying value-attitude theme, it will be important to state the contextual principle with regard to the several indices of respect.[13] To revert to an example presented above, the fact that children and adolescents are excluded from many activities and are inhibited in many ways will form part of the most indulgent socialization process. Respect here involves allowing opportunities for preparing to strive for prestige statuses and associated roles. The rights of children are definitely breached when child labor curtails such opportunities. On the other hand, in basically agricultural folk societies, the lack of early training and exposure to many chores and labor tasks associated with this fundamental enterprise would probably make misfits of them. Again, the killing of the aged may,

12 Redfield, *op. cit.*, Chapter 3.

13 Variously labelled "definition of the situation" by W. I. Thomas, and "context of the situation" by B. Malinowski.

in one instance, amount to outright murder, while in another it will be an honor toward which a person looks forward, may even solicit, as he approaches or reaches the old age category.

Finally, with regard to context, we must take account of differences between absolute and relative changes in opportunities for achieving status in the time scale. For example, a summary of the changing position of the Negro in the United States disclosed that the *ratio* of skilled to unskilled Negro labor had fallen in comparison with the national average, between the years 1910-1930. Despite this fact an absolute increase in numbers of skilled and unskilled workers had occurred among their ranks.

With these prefatory remarks, the following outline is proposed as a framework within which a cross-cultural analysis might be undertaken.

IV. ANALYSIS OF SHARED RESPECT IN TERMS OF BIO-SOCIAL ATTRIBUTES

SEX

Locus of Respect (Activities)	*Social Participation*	
	Discrimination (Demands) (Expectations)	*Alternatives* (Demands) (Expectations)
1. Acquisition of skills and talents	Closed or restricted	Variable and open
2. Practice of skills and talents	Closed or restricted	Variable and open
3. Occupational functions	Limited choice or ascribed; of interior prestige	Multiple choice; achieved through merit
4. Labor relations	Distinctions in share of produce, wages, leisure; no provision for female disabilities	Similar rewards for similar jobs
5. Commodity exchange		
6. Property rights and inheritance	Unilaterally weighted	Equally distributed rights
7. Social control	Male dominating	Egalitarian
8. Sanctions	Applied more severely to one sex than to other for same offense	Applied in same way for same offenses
9. Political leadership and distribution of political power	Unilaterally weighted	Equally distributed rights and opportunities
10. Public service	Unilateral recognition	Equal recognition for same service
11. Movement	Restricted	Free

12. Interest activities (social, economic, political)	Sex-linked associations of differential prestige ranking	Mixed variant associations
13. Maintenance of health, treatment of sick and dependent	Differentially applied	Free and equal access to existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of ascribed status; clothing, housing, food tabus, etiquette (greeting, walking, procession, topics for, and manner of, discourse, emblems, epithets)	No symbols indicative of ascribed status
15. Standards of morality	Double standard	Single standard

AGE

Locus of Respect (Activities)	*Social Participation*	
	Discrimination	*Alternatives*
	(Demands) (Expectations)	(Demands) (Expectations)
1. Acquisition of skills and talents	Closed or restricted	Variable and open
2. Practice of skills and talents	Closed or restricted	Variable and open
3. Occupational functions	Limited choice or ascribed; of inferior prestige	Multiple choice; achieved through merit
4. Labor relations	Forced labor (e.g., child labor), unilaterally controlled wages, share of produce, leisure	Equable relations among all producers; similar rewards for similar jobs
5. Commodity exchange		
6. Property rights and inheritance	Differential and unequal (e.g., older brother over younger)	Equal or arranged by agreement
7. Social control	Old over young—absolute, imperious beyond childhood	Customary equality, legal rights extending to all categories
8. Sanctions	Inequitably applied at different age levels (frequency, severity)	Applied in same way for same offenses
9. Political leadership and distribution of political power	Inherited by members of one age category or otherwise excluded to others	Achieved through merit
10. Public service	Opportunities for distinction lacking, unrewarded, or differentially rewarded	Similar opportunities and rewards for services
11. Movement	Restricted to certain categories	Free

12. Interest activities (social, economic, political)	Associations lacking or prohibited for certain age groups; age-linked associations of differential prestige ranking	Mixed variant associations
13. Maintenance of health, treatment of sick and dependent	Differentially applied to various categories	Free and equal access to existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of ascribed status; clothing, housing, food tabus, etiquette (greeting, walking, procession, topics for, and manner of, discourse; emblems; epithets)	No symbols indicative of ascribed status
15. Standards of morality	Multiple standards	Single standards

KINSHIP

Locus of Respect (Activities)	*Social Participation*	
	Discrimination	*Alternatives*
	(Demands) (Expectations)	(Demands) (Expectations)
1. Acquisition of skills and talents	Specific modes, entirely within kin group	Variable and open
2. Practice of skills and talents	Specific modes, entirely within kin group	Variable and open
3. Occupational functions	Duty to perform specialized functions	Multiple choice; achieved through merit
4. Labor relations	Organized within system of kinship rights and duties	Based on contract with similar rewards for similar jobs
5. Commodity exchange	Organized within system of kinship rights and duties	Free exchange of all privately owned commodities
6. Property rights and inheritance	Restricted to kin; spouses do not inherit from one another; special obligations to kin	Individual ownership; freedom of rights to disposal
7. Social control	Tight system of mutual rights and responsibilities (marriage, divorce, remarriage, etc.); generalized kin relationships beyond recognized relatives	Individual responsibility under civil administered controls
8. Sanctions	Collectively applied by kin groups; similarly resisted	Delicts of individual cases considered on civil codes of justice

9. Political leadership and distribution of political power	Inherited along kinship lines	Open and elective
10. Public service	Differentially recognized; or rewards only within kin group for services rendered it by members	Recognition and reward on basis of individual service to civil community
11. Movement	Restricted because of hostility between kin groups	Free
12. Interest activities (social, economic, political)	Maintained and organized with kin groups	Access to other collectivities (political, economic, recreational)
13. Maintenance of health; treatment of sick and dependent	Mutual aid only within kin groups	Free and equal access by individuals to all existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of family status	No symbols indicative of family status
15. Standards of morality	Differential kin group standards	Single standard

LOCALITY

Locus of Respect (Activities)	*Social Participation*	
	Discrimination	*Alternatives*
	(Demands) (Expectations)	(Demands) (Expectations)
1. Acquisition of skills and talents	Restricted in whole or in part to natives of community or larger regional unit	Variable and open
2. Practice of skills and talents	Restricted in whole or in part to natives of community or larger regional unit	Variable and open
3. Occupational functions	Local or regional specialization ascribed (as in colonial exploit)	Multiple choice based on full utilization of local potentialities
4. Labor relations	Distinctions in share of produce; wages, leisure; forced labor—based on local origins	Similar rewards for similar jobs
5. Commodity exchange	Distinctions in trading practices within in-group and between in-group and others	Free and equal exchange of all commodities through common value medium

6. Property rights and inheritance	Restricted to members of local groups; limited rights of disposal	Individual ownership; freedom of rights to disposal
7. Social control	Responsibility of in-group members less than that of outsiders; kinship liability	Civic controls broadly conceived; individual responsibility
8. Sanctions (including fines, confiscations, tolls, tariffs, and taxation)	Differentially applied favoring members of local group	Indulgent behavior toward aliens
9. Political leadership and distribution of political power	Recruitment in favor of one community or region over another (urban over rural)	Recruitment on basis of individual merit
10. Public service	Recognition and rewards to members of in-group only	Equal recognition and reward for same services
11. Movement	Restricted	Free
12. Interest activities (social, economic, political)	Restricted partially or wholly to in-group; differential prestige ranking	Mixed variant associations
13. Maintenance of health; treatment of sick and dependent	Differentially applied by local groups to own members and outsiders	Free and equal access to existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of local group status: emblems, clothing, tabus, etiquette, epithets	No symbols indicative of ascribed status
15. Standards of morality	Variable standards between local groups	Single standard

ETHNIC ORIGINS

(Identification by race and cultural symbols, including religious beliefs and practices)

Locus of Respect (Activities)	*Social Participation*	
	Discrimination	*Alternatives*
	(Demands) (Expectations)	(Demands) (Expectations)
1. Acquisition of skills and talents	Closed or restricted to various ethnic groups	Variable and open
2. Practice of skills and talents	Closed or restricted to various ethnic groups	Variable and open
3. Occupational functions	Limited choice or ascribed; of inferior prestige	Multiple choice, achieved through merit
4. Labor relations	Forced labor; distinctions in share of produce, wages, leisure; no provisions for cultural demands	Similar rewards for similar jobs

5. Commodity exchange	Distinctions in trading practices between ethnic groups	Equivalent exchange of all commodities through common value medium
6. Property rights and inheritance	Restricted to certain groups (e.g., covenants)	Equally distributed rights
7. Social control	Unilateral: dominant group over subordinate group(s); pronounced social distance	Applied to all in same manner for same offenses
8. Sanctions	Differential levying of fines, confiscations, punishments; group liability	Applied to all in same manner for same offenses; individual liability
9. Political leadership and distribution of political power	Recruitment restricted in part or wholly to certain groups only	Equally distributed rights and opportunities
10. Public service	Differential recognition for local group service	Equal recognition for same services
11. Movement	Restricted (e.g., various segregation practices)	Free
12. Interest activities (social, economic, political)	Group-linked associations of differential prestige ranking	Mixed variant associations
13. Maintenance of health; treatment of sick and dependent	Differentially applied by community	Free and equal access to existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of ethnic origins: clothing, housing, food tabus, etiquette, epithets	No symbols indicative of ethnic origins
15. Standards of morality	Multiple standards	Single standard

STRATIFICATION
(Social status; prestige status; economic class, caste)

Locus of Respect (Activities)	*Social Participation*	
	Discrimination	*Alternatives*
	(Demands) (Expectations)	(Demands) (Expectations)
1. Acquisition of skills and talents	Closed or restricted	Variable and open
2. Practice of skills and talents	Closed or restricted	Variable and open
3. Occupational functions	Limited choice or ascribed; of inferior prestige	Multiple choice; achieved through merit

4. Labor relations	Forced labor; distinctions in share of produce, wages, leisure; restrictive measures; fixed employer-employee relations	Similar rewards for similar jobs; free bargaining between employer and employee
5. Commodity exchange		
6. Property rights and inheritance	Restricted rights to use and disposal	Free and equally distributed rights
7. Social control	Unilateral; vested in one or few status groups at expense of others	Same measures applicable to all groups for same offenses
8. Sanctions	Differential levying of fines, confiscations, punishments	Applied to all in same manner for same offenses
9. Political leadership and distribution of political power	Recruitment restricted in part or wholly to certain groups only	Equally distributed rights and opportunities
10. Public service	Differential recognition on basis of status, class or caste	Equal recognition for same services
11. Movement	Restricted	Free
12. Interest activities (social, economic, political)	Group-linked associations of differential prestige ranking	Mixed variant associations
13. Maintenance of health; treatment of sick and dependent	Differentially accessible	Free and easy access to existing facilities
14. Symbolic status references (sociocentrism)	Symbols indicative of status, class or caste: clothing, housing, tabus, etiquette, epithets	No symbols indicative of status, class or caste
15. Standards of morality	Multiple standards	Single standard

Although lacking completed cultural analyses based upon the proposed outline, we can at least indicate one procedure for organizing and presenting materials. The mechanics of this procedure consists of the following steps. Under each category the analyst distinguishes a varying number of indices relating to significant aspects of participation, in the context of the particular culture. Secondly he summarizes the results of his findings as inferences. At the end of this phase of the analysis, finally, are appended relevant tables and charts, where available, or any other kinds of diagnostic data upon which the inferences are based. The appendix also includes sources of information.

When the several factors—sex, age, etc.—have been accounted for in this

fashion, two steps remain, namely, an evaluation of trends for each and an over-all evaluation of trends for the society as a whole. Ideally the data should be amenable to quantifiable analysis. Thus, we should like to know whether or not expectations in the United States for equal access of females to all desired modes of training in, and practice of, special skills have increased in the past sixty years. We want to know, also, by how much, in what spheres, in what proportion to the total population of the same age classes, etc. In many cases, however, it will be possible only to approximate these conditions, and in some areas, as in the Middle East (Turkey, Egypt) the analyst would have to fall back largely upon essay-type statements. Even then a systematic assemblage of comparable materials would contribute toward an understanding of the diffusion of the shared respect goal value over the world community. What should become apparent is the extent to which sociostatism delimits the behavior of the individual, or fails to do so. The resultant studies should also depict the correspondences between theory and practice, and the actual or potential vitality of a society's myths in effecting greater congruence in practice.[14]

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14 Gunnar Myrdal, in his well known study of the American Negro, makes the cogent observation, that the Negro's "share" stands to increase in the future because of America's conscience, as expressed in the still meaningful constitutional myths of freedom and equality (see *The American Dilemma*, vol. 1, chapter 1).

PLANT GATHERING IN THE ECONOMIC LIFE OF EURASIA

BÉLA GUNDA

IN EASTERN EUROPE several remains of a plant-gathering economy are still found. The Slavic peoples, the Rumanians, the different Finno-Ugrian and Turkish peoples gather the leaves, roots, rhizomes, stems, and the fruits of innumerable wild plants for food, medicine, and dyeing. They sew with thin bast and cover their huts with bark, of which they make several kinds of vessels and sandals too. Some wild plants have a great importance in fishing with poison.[1] In regard to gathering, it is significant that the fishermen of the marshes of the Save River in Hercegovina gather and consume more than thirty different wild plants.[2] There are certain districts in Hungary, too, the inhabitants of which are not inferior to these fishermen in this respect. It was recently recorded that for food and medicine the inhabitants of a Hungarian village in the Transdanubia gather many different mushrooms (about 150 kinds), wild fruits, and the leaves, stems, and roots of wild plants.[3] But, of course, the principal occupation of this village is farming. Among the Siculians (a Hungarian ethnical group in Transylvania, the Hungarian name is Székely) the women gather beechnuts which yield oil. Among the Siculians the gathering of beechnuts is just as indispensable an occupation as ploughing or sowing.[4] The gathering and consuming of the fruits and rhizomes of wild plants (*Trapa natans, Phragmites communis, Typha latifolia)* is highly important among the Rumanian fishermen living in the Danube Delta.[5]

Till the end of the nineteenth century the characteristic representatives of the gathering mode of life were the Hungarian pákász (predatory man, in German Wildbeuter) living in the marshes (Little- and Great-Sárrét, Ecsedi Marsh, Rétköz, Bodrogköz, etc.) of the Great Hungarian Plain. The pákász fished with primitive implements: he caught fish with his hands, used the creel (fish-trap), and knew methods of fishing with poisons. Further, he caught game and water

1 K. Moszyński, *Varia: 2. Verbreitung der Giftfischerei auf der Erde: 3. Die Giftfischerei bei den Slaven* (Lud Slowianski, vol. 4, Krakow, 1938), pp. B36-B45.

2 K. Moszyński, *The Culture of the Slavs* [in Polish] (Krakow, 1929), vol. 1, p. 12.

3 J. Bödei, *Contributions to the Gathering-Economy of Zalabaksa* [in Hungarian] (Néprajzi Muzeum Értesitöje, vol. 35, Budapest, 1943), pp. 69-96.

4 B. Gunda, *Sammelwirtschaft bei den Ungarn* (Ungarische Jahrbücher, vol. 18, Berlin, 1938), p. 307.

5 G. Antipa, *Fishing and Fishing Implements in Rumania* [in Rumanian] (Bucharest, 1916), pp. 762-763.

fowl with dead-falls, simple snares, and spring-pole snares. In hunting, the pákász used casting-staffs sharpened at both ends.[6] He gathered the edible plants of the marshes, the eggs and colored feathers of wild birds,[7] caught leeches and tortoises, and removed the honey of bees hiving in hollow trees.

The wife of the pákász gathered medicinal plants, which she took to sell from market to market and from village to village. The pákász paid no taxes. He despised farming and chose starvation rather than to plough and sow. In summer the pákász always migrated in the marshes. There for weeks he lived in primitive huts made of reeds; then he withdrew to other territories richer in game and edible wild plants. In winter he huddled in underground huts. The implements of the pákász were extremely simple: he used shells *(Anodonta)* fitted with reed handles for spoons; his knife and fork were made of reed. He made a fork of the beak of *Platalea leucorodia* L. The pákász maintained barter with the villagers.

This peculiar mode of livelihood came to an end when, at the end of the nineteenth century, the marshes of the Great Hungarian Plain were drained. Thereafter most of the pákász-community became herdsmen or cornfield-keepers.[8]

From an ethnological perspective we must point out that among the horse-breeding and reindeer-breeding nomadic peoples of Eurasia gathering is an important supplement to pasturing and hunting. Gathering has great importance among the pastoral peoples. The Hungarian herdsmen on the Great Hungarian Plain consume flour-containing rhizomes raw, boiled, and roasted. Plants having rhizomes and fruits of this kind are *Lathyrus tuberosus, Typha latifolia, Typha angustifolia, Butomus umbellatus, Alisma plantago-aquatica, Bolboschoenus maritimus, Sagittaria sagittifolia, Phragmites communis, Trapa natans,* etc.[9] At the

6 This casting-staff resembles the casting-staff of the Hungarian herdsmen (cf. B. Gunda, *The Casting-Staff used by Hungarian Herdsmen and its Ethnological Significance,* Man, vol. 41, London, 1941, pp. 18-19). I should remark here that in this article there is a misprint: the caption to Fig. 2, B correctly reads *Casting-Staff of the Kara-Kirghis.*

7 The collecting of the eggs of wild birds (especially those of water fowl) for food plays an important role in the whole of north Eurasia and eastern Europe (F. Linnus, *On the Collecting of the Eggs of Wild Birds,* Eesti Rahva Muuseumi Aastaraamat, vol. 8, Tartu, 1934, pp. 155-180). The Hungarian herdsmen, too, collect many eggs of wild birds (I. Tálasi, *The Animal-Breeding of the Farmers of Little Kunság* [in Hungarian] (Budapest, 1936, pp. 26-27).

8 I have written on the mode of life of the pákász in the following places: Gunda, *Sammelwirtschaft bei den Ungarn,* p. 303; B. Gunda, *Ethnography [of the Hungarian people]: a Companion to Hungarian Studies* (Published by the Society of the Hungarian Quarterly, Budapest, 1943, pp. 294-295).

9 Gunda, *Sammelwirtschaft bei den Ungarn,* p. 303; B. Gunda, *The Anthropogeography of the Pasturing on the Great Hungarian Plain* (International Review, Hungarian Geographical Society, vol. 68, Budapest, 1940), pp. 34, 36, 42-43.

end of the nineteenth century the Hungarian herdsmen on the Tisza River ate only the root of *Crambe tataria* for days at a time. The Hungarians in Transylvania venerate the *Crambe tataria* very much, for it saved a lot of people from starvation in the years of privation. Among the Hungarian and Rumanian shepherds in Transylvania I observed on several occasions that various berries (*Cornus mas, Vaccinium myrtillus, Vaccinium vitis-idaea, Fragaria vesca,* etc.) are gathered and consumed. The Rumanian shepherds in Transylvania gather the fresh leaves of the *Rumex*-family and different mushrooms for curdling sheep milk. The Rumanian shepherds occupy themselves with gathering resin which they use for lighting, but is often applied to wounds, too. In Transylvania I have, several times, seen Rumanian shepherds chewing the collected resin as if it were chewing gum.

The Hungarian herdsmen gather the dung of animals and heat with it. The same may be observed among the Kirghiz, Mongols, and in Tibet.

Hungarian herdsmen plunder animal hoards also. In autumn they dig up the burrows of *Mus spicilegus, Heliomys, Spermophilus citellus,* and remove the grains gathered there. In this way they often obtain several sacks of grains. Among the Hungarians in Transylvania (in the valley of the Lápos River) it is customary in autumn for the men to start for the woods to remove the hazelnuts gathered in the burrows of a certain species of mouse. In the eastern parts of Transylvania the Siculians collect the hazelnuts found in the burrows of the squirrel and the *Myoxis glis.* To this archaic gathering or plundering—as we well may call it—we many mention very interesting parallels found in northern Asia. The ancient inhabitants of the Kamchatka Peninsula dug up the bulbs of a species of lily heaped in the dens of a particular kind of mouse, and thereafter compensated the mouse by placing broken pine-needles or cedarnuts into the dens.[10] For the bulbs of various lilies and other plants the Tungus and the Sagai Tartars dig up the nests of the steppe-mouse.[11] In Valdai and its vicinity (Gov. Novgorod, Russia) the earth-nut (*Carum bulbocastanum*), heaped by the mole in its underground chambers, is gathered.[12]

Nickul writes the following of the Skolt Lapps living in Finland (they are fishermen and reindeer-breeders):

The Skolts are particularly fond of cloudberries (*Rubus chamaemorus*) and red

10 A. Byhan, *Die Polarvölker* (Leipzig, 1909), p. 59.

11 P. S. Pallas, *Reise durch verschiedene Provinzen des Russischen Reichs* (vol. 3, St Petersburg, 1776), pp. 195-196, 350.

12 I. Manninen, *Überreste der Sammlerstufe und Notnahrung aus dem Pflanzenreich bei den nordeurasischen, vorzugsweise den finnischen Völkern* (Eurasia Septentrionalis Antiqua, vol. 6, Helsinki, 1931), p. 30.

whortleberries (*Vaccinium vitis-idaea*) which they store. For preserving they use sugar sparingly; the berries are usually crushed. Even in April you may be offered cloudberries. Mushrooms they eat, but do not salt for the winter.[13]

We may also quote many similar observations on the Lapps. Manninen pointedly notes that the peoples of northern Eurasia, especially the Finno-Ugrians, consume many different wild plants.[14] We have an abundance of data indicating that flour-containing roots and rhizomes are highly important in the households of reindeer- and horse-nomads, and, as among the Hungarian herdsmen in Europe, these products substitute for bread. The Siberian pastoral peoples gather the roots of *Polygonum bistorta* for winter food. The Samoyed eat the roots of the *Polygonum viviparum* with reindeer meat; further they consume the roots of a variety of the *Oxytropis* species. We know that the Vogul prepare flour of the rhizomes of the *Calla palustris*. The Kalmuck roast the rhizomes of the *Alisma plantago-aquatica*, and consume them to satiation. The Kalmuck and Yakut consume the roots of the *Sagittaria sagittifolia* with meat.[15] The Sagai Tartar, the Beltir, and the Koibal, besides breeding horses and sheep, concern themselves with hunting. They gather the roots and fruits of many wild plants, eating them roasted and boiled with milk and meat. Among others, they gather the crops of the wild Siberian knot-grass.[16] Various wild medicine plants also have importance among them.

The Yakut gather, among others, the roots and rhizomes of the *Butomus umbellatus, Sanguisorba officinalis, Typha latifolia, Lilium martagon*, and the *Lilium spectabile*. They dry and grind the rhizomes and use them instead of flour for preparing a food called butugas.[17] Maurizio enumerates a considerable number of wild plants which the Mongols gather and use for food. Among these plants those having flour-containing roots and seeds are of great importance. Before consumption they are roasted in the fire.[18] The Mongols collect the seeds of *Arundo villosa* Trin. and *Elymus giganteus* Vahl. in large quantities. After drying they grind these seeds with querns and make porridge of their flour mixed with fat.[19] Rockhill writes of the Mongols living in the vicinity of Dolōn-nōr:

13 K. Nickul, *The Skolt Lapp Community Suenjelsijd during the Year 1938* (Stockholm, 1948), p. 69.

14 Manninen, *op. cit.*, pp. 30-48.

15 *Idem*, pp. 31-33.

16 Pallas, *op. cit.*, pp. 349-352; W. Radloff, *Aus Sibirien* (2 vols., Leipzig, 1893).

17 A. Maurizio, *Die Geschichte unserer Pflanzennahrung von den Urzeiten bis zur Gegenwart* (Berlin, 1927), pp. 22-23.

18 *Idem*, pp. 24-25.

19 *Idem*, pp. 38-39.

"Here and there on the level grows a low brush called *haṛamagu* (*Nitraria Schoberi*) of which camels are very fond, and whose red berries the Mongols sometimes cook and eat."[20] The roots of the *Potentilla anserina* (choma) are an important source of food of the Mongols and nomads in Eastern Tibet.[21] The annals of the Sui (AD 581-618) and of the T'ang (AD 618-905) dynasties contain some interesting notices on the early population of the Kuku-nōr and Ts'aidam. One of the annals (T'ang shu, Book 221) records the following of the T'ang hsiang people:

> They have no houses, but with the hair of their yak and the wool of their sheep they weave stuff out of which they make tents, whose location they change according to the season of the year. . . . They live on roots and game. . . . Their domestic animals comprise yak, horses, asses, and sheep, which they eat. They do not till the soil. . . . They get barley from neighboring countries; from it they make a fermented drink.[22]

It is fairly possible that the roots mentioned in the Chinese annals are those of the *Potentilla anserina*. One of the tribes of the Tungus, the Orochon (famous reindeer-breeders and hunters) gather various wild plants and mushrooms for cooking tea.[23] They gather the orchoda-roots in large quantities, and sell them to the Chinese.[24] The Mongolian-speaking Todsas, living on the upper Yenissei River in the Republic Tannu-Tuwa, are reindeer-breeding nomads. In preparations with reindeer-meat and reindeer-milk, divers plants play an important role. Among these people the gathering of a variety of roots is a highly important economic activity.[25]

All these data show that the pastoral mode of life cannot be considered wholly separated from a gathering economy. Among the pastoral peoples the gathering of wild plants is a very important activity. In supporting life leaves, stems, rhizomes, and roots are just as important as the meat or milk of animals. The flour-containing rhizomes and roots which susbtitute for bread among the pastoral peoples are especially significant. The ever-moving and migrating pastoral peoples

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20 W. W. Rockhill, *The Land of the Lamas: Notes of a Journey through China, Mongolia and Tibet* (London, 1891), pp. 135-136.

21 *Idem*, pp. 79, 111, 190.

22 *Idem*, p. 338.

23 L[eo] St[ernberg], *Einige Worte über die Orotschonen* (Globus, vol. 37, Braunschweig, 1890), p. 217.

24 P. v. Stenin, *Ein Beitrag zur Ethnologie des Amurlandes* (Das Ausland, vol. 63, Stuttgart, 1890), pp. 772-773.

25 D. Carruthers, *Unknown Mongolia: a Record of Travel and Exploration in North-West Mongolia and Dzungaria* (London, 1913), vol. 1, p. 174.

have no possibility of cultivating cereals, and thus very often gathering substitutes for the cultivation of cereals.

At a more developed stage of economic life, after the professions became differentiated, herdsmen get the bread or grains necessary for preparing porridge or bread from farmers. This may be observed among the Hungarian herdsmen of today. At present the Hungarian herdsmen tend the herds of peasants who are concerned with farming. For tending the herds on the Great Hungarian Plain the herdsmen receive millet and maize for preparing porridge, and wheat flour for baking bread. Very often the Hungarian herdsmen receive ready-made bread too, baked by the farmer's wife.

Naturally, pasturing does not in all cases exclude a certain stage or form of agriculture. Just as gathering and pasturing are combined within the mode of life of one and the same people, pasturing and agriculture (plant-cultivation) also are combined. We see this among the Kirghiz who sow millet primarily and less barley and wheat. The grainfields of the Kirghiz are adjacent to their winter camping places. They sow their fields in spring, and thereafter migrate northwards or into the mountains. At the winter campgrounds are left but a few servants to watch and water the crops. The nomadic Kirghiz reap the crops and store the grains in pits in autumn, after their return to the winter camps.[26]

In 1941 I observed in northern Transylvania (in the valley of the Lápos River) that the Hungarian and Rumanian farmers keep their sheep in the mountains, far from the villages. The sheep spend the winter in simple sheepfolds where they feed on withered leaves and hay. During this time the sheep manure the soil of the sheepfolds well. At the end of April or in the beginning of May the sheep go to graze on the summer pastures, while in the manured soil of the sheepfolds the women cultivate cabbages, potatoes, gourds, beans, and maize. This soil is tilled with iron hoes. These plants are reaped by the women in autumn, before the shepherds and sheep return from the summer pastures. It is worth mentioning that in the manured soil of the folds innumerable *Chenopodium album* grow. In spring the Rumanian and Hungarian women gather the leaves of this wild plant to prepare a vegetable food of them. My observations in the valley of the Lápos River reveal a most striking example of the combination of the gathering of wild plants, hoe-culture, and pasturing. Similar economic activities may be observed among the Rumanian shepherds in County Bihar, Transylvania, and among the Turks of Asia Minor.[27] In addition to this I may also

26 Fr. v. Schwartz, *Turkestan, die Wiege der indogermanischen Völker* (Freiburg im Breisgau, 1900), pp. 78-79.

27 B. Gunda, *The Connection of Settlements, Farming and the Forms of Courts in the*

mention the following. In the Lápos River valley the Hungarian farmers, besides the gathering of wild plants, hoe-culture, and pasturing, carry on intensive cultivation of wheat, barley, and rye. In winter every farmer tends his sheep in his own fold far from the village. From May till late in autumn, however, the sheep of different farmers pasture in communal flocks, which are tended by a few shepherds whom the farmers collectively pay. The shepherd receives cheese, bacon, and maize flour besides his pecuniary wages. In general the Hungarian farmers have Rumanian shepherds.

These few data fairly show that it is impossible to draw sharp limits between the different economic forms and to confine them within categories. The different complexes of a gathering economy life belong with pasturing, just as in some cases a primitive form of agriculture may supplement pasturing. It is not the task of the ethnologist to draw arbitary limits and to lay down categories, but to observe and to state the combination and connection of the several modes of life and forms of economy.

The most important implement of the plant-gathering activity is the digging-stick. In Europe and Asia extremely primitive forms of digging-sticks have come down to us. Herewith I show some of them (Figs. 1 and 2). The complete material I shall impart in my forthcoming work entitled *Before the Plough in Eurasia.*

The stick of the Hungarian women (in the village of Szentgál, County Veszprém) may be regarded as a primitive digging-stick (No. 1). This stick has three branches, and while looking for mushrooms in the woods, the withered leaves covering the ground are stirred with it.[28] In central Transylvania (Magyarpalatka village, County Kolozs) I have found a quite simple digging-stick among the Hungarians. This is about 40 cm long, its end flattened (No. 2). With this the children dig up the root of the *Chaerophyllum bulbosum* L. in spring. They scrape the skin off the root to eat it in raw condition. In the past among the Hungarians and in eastern Europe generally the root of the *Chaerophyllum bulbosum* L. was an important source of food. The old Hungarian cookery-books (17-18th century), too, describe the various ways of consuming this root. Another primitive form of digging-stick is recorded also from a Hungarian area (Zalabaksa village, County Zala). The upper end of this digging-stick has two branches, whereas its lower end is flattened. Its length is about 36 cm (No. 3).

Upper Lápos Valley [in Hungarian] (Geographical Review, vol. 69, Budapest, 1941), pp. 240-246.

28 Data from the records of my colleague, Dr. A. Vajkai (Budapest).

With this peasants dig up the underground hollow of the bumble-bee (*Bombus terrestris*) to remove the honey.[29]

Spear-like digging-sticks are employed among the White Russians on the upper Niemen and upper Bug Rivers (No. 4, A, B). These are made wholly of wood, and medical plants or potatoes are dug up with them.[30] Likewise among

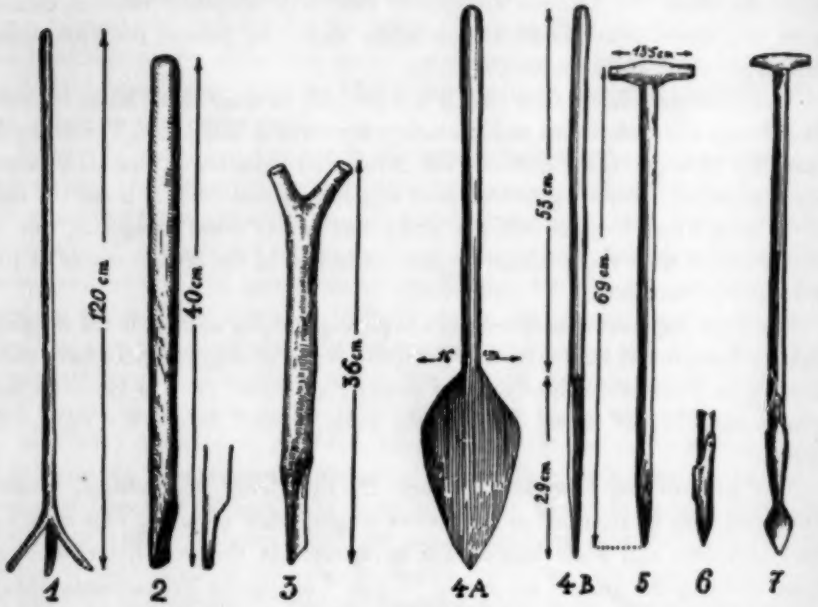

FIG. 1. Central and East European digging-sticks. No. 1: Hungarian—Szentgál, County Veszprém, Hungary (after A. Vajkai); No. 2: Hungarian—Magyarpalatka, County Kolozs, Transylvania; No. 3: Hungarian—Zalabaksa, County Zala, Hungary (after J. Bödei); No. 4: White Russian—Berszty, East Poland (after K. Moszyński); No. 5: White Russian—Iła, East Poland (after K. Moskzyński); No. 6: White Russian—same provenience as No. 5; No. 7: Esthonian—Saaremaa, Esthonia (after I. Manninen).

the White Russians on the upper Wilja and upper Niemen Rivers there are digging-sticks used which resemble a sharpened stick (Nos. 5, 6). On the end of these sticks iron edges are often fixed (No. 6). Such sticks are used for digging up potatoes or roots.[31] Similar digging-sticks are well known among the

29 Bödei, *op. cit.*, p. 87.

30 Moszyński, *The Culture of the Slavs*, vol. 1, p. 22; K. Moszyński, *Ethnogeographische Studien in Ostpolen* (reprints *A Journey through the Eastern Provinces of Poland in the Year 1926*, Krakow, 1929), p. 144.

31 *Ibid.*

Esthonians (No. 7) with which they dig up potatoes.[32] The digging-sticks for edible roots used by the Bashkir living along the Ural have a peculiar form. The Bashkir name of the digging stick is salɛr. The helve of the salɛr is 56 cm long. To the end of the helve an iron slipper-shaped quill is fastened. The salɛr has foot-rests on both sides (No. 8, A, B, C) with which it is driven into the soil.[33]

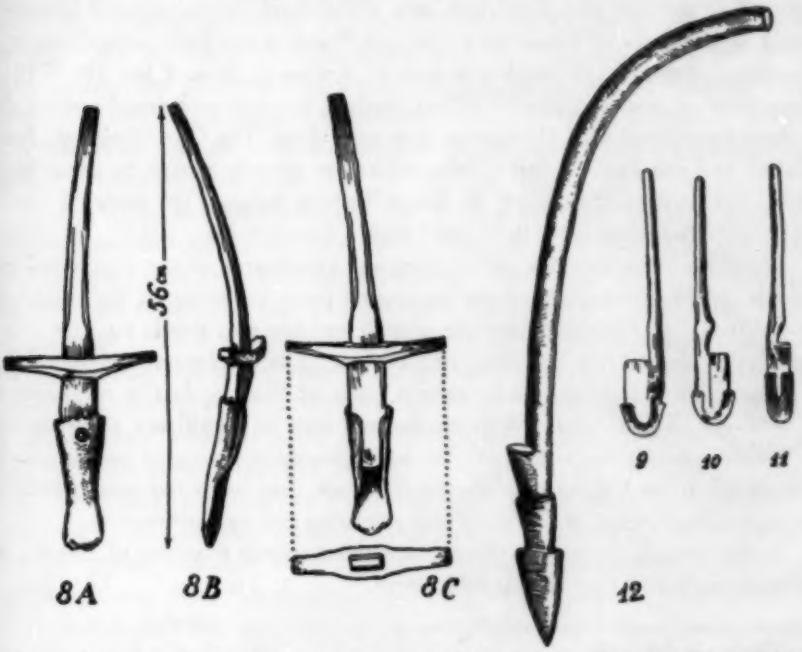

FIG. 2. Digging-sticks and spades from Central and East Europe and Siberia. No. 8: Bashkir—Tupak, Gov. Orenburg, Soviet Russia (Budapest, Ethnographical Museum, No. 83.361); Nos. 9-10: Primitive spades from the Hungarians—Kalotaszeg, County Koloza, Transylvania (after Zs. Bátky); No. 11: Servian spade—Krushevacz, Servia (after K. Moszyński); No. 12: Sagai Tartars—Kuzneck and neighborhood, Siberia (after P. S. Pallas).

In Korea a spade-like digging-stick (dora-dzi-ggod-tzang-i) is used. This is described by Heydrich as follows:

A stick of hard wood (oak in most cases), being about 120 cm long and as thick as an arm, is slightly flattened at the lower part, and in front sharpened with an ax. For the foot there is a foot-rest inserted in the flattened part about 30 cm above the

32 I. Manninen, *Die Sachkultur Estlands* (Tartu, 1933), vol. 1, p. 42, fig. 9, 3.
33 Ethnographical Museum, Budapest, No. 83361.

lower end, whereas at the upper end there is a cross-head serving as handle for both hands.[34]

With these roots are dug up in the mountainous regions of Korea.

In my opinion a further development from the digging-stick is the primitive spade having a foot-rest on one side only. Such spades really are but digging-sticks flattened at the end and fitted with iron shoes. Such forms are well known in Servia (the vicinity of Krushevacz, No. 11)[35] and in the Kalotaszeg District (a Hungarian district of Transylvania west of Kolozsvár, Nos. 9 and 10).[36] Nowadays these implements serve for tilling gardens, but it is probable, however, that in the past roots of wild plants were dug with them. The Gael (Inishire, Arran Island) and the Zuñi Indian digging-sticks are entirely similar to these implements.[37] The digging-stick of the Sagai Tartars, utilized for roots of various wild plants, is also an implement fitted with a foot-rest (No. 12).[38]

These few data show the distribution and significance of the digging-stick in Eurasia. It is surprising that these implements occur in territories the inhabitants of which at the same time know the plough and hoe too: this is the case among the Hungarians, White Russians, and Bashkir. The employment of the plough and that of the digging-stick in various parts of Eurasia do not represent two successive economic forms. Both implements may be significant elements of a people's culture at the same time. In the economic structure of certain peoples the plough is used along with the digging-stick, just as in the cases mentioned above, plant-gathering is combined with pasturing and agriculture.

In my opinion, from this point of view the economic structure of Eurasia still contains many surprises for the ethnologist.[39]

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34 M. Heydrich, *Koreanische Landwirtschaft: Beiträge zur Völkerkunde von Korea, I* (Abhandlungen und Berichte, Museen für Tierkunde und Völkerkunde zu Dresden, vol. 19, Dresden, 1931), p. 29.

35 Moszyński, *The Culture of the Slavs*, vol. 1, p. 146, fig. 116.

36 L. Kovács, *Ackergeräte in Ungarn* (Ungarische Jahrbücher, vol. 18, Berlin), p. 265; Zs. Bátky, *A Guide to the Organization of Ethnographical Museums* [in Hungarian] (Budapest, 1906), p. 35, table 2.

37 P. Lesser, *Ackergeräte mit Stelztritt* (Ethnologica, vol. 3, Leipzig, 1927), pp. 286-288, figs. 3, 5.

38 Pallas, *op. cit.*, pp. 349-350.

39 I am grateful to Dr L. K. Kovács (Budapest) for having prepared the illustrations for the present article.

THE INTERPRETATION OF SOME DOCUMENTARY EVIDENCE ON CARIB CULTURE

DOUGLAS TAYLOR

IN ESSENCE, the present paper is a series of commentaries on Rouse's presentation of Carib culture in Volume 4 of the *Handbook of South American Indians*.[1] The summary which he offers is excellent in many ways and will be much appreciated by those who want a précis of the scattered material on the Carib. Yet there are a number of points which need reweighting and correcting in the light of a better understanding of the documentary evidence for Carib culture in early colonial times.

If it is true, as Steward says in his "Preface" to this volume,[2] that "The Circum-Caribbean area is not only the least known of all South America, but it is perhaps the most important to problems of native American culture history," it is the more remarkable that its most richly documented sub-area, the Antilles, has received so little attention from ethnologists and ethnographers in recent decades. To the best of my knowledge, the source material has never been compiled and evaluated; and no exhaustive study of the few remaining descendants of its pre-Conquest inhabitants has been undertaken. For it is not quite accurate that "The Antillean tribes may be said to be extinct," as Steward declares on page one of this volume of the *Handbook;* nor is it true, as he asserted in his article on "The Changing American Indian," that the Black Carib of Central America "speak French."[3] Referring to Arawak Indian remnants in Cuba and Trinidad, Rouse says: "A thorough study of the customs of these two places, westernized though they are, might reveal some survivals from prehistoric times."[4] Certainly, as I have tried to show on several occasions, the Carib remnant in Dominica offers more in the way of racial and cultural survival than is commonly believed, or could possibly be guessed from the miserable photograph of St Vincent "Carib descendants" on Plate 98 of this volume.[5] On the other hand, the Black Carib of Central America, Negroid as they are today (a characteristic shared to a considerable extent by their neighbors, the less numerous Mosquito

1 *The Circum-Caribbean Tribes* (Bulletin, Bureau of American Ethnology, no. 143, vol. 4, Julian H. Steward, ed., Washington, 1948).

2 *Handbook*, p. xvi.

3 *The Science of Man in the World Crisis* (New York, 1945), p. 297.

4 *Handbook*, p. 521.

5 With which compare, for example, the photographs of Dominica Caribs in Natural History, vol. 48, New York, 1941, pp. 40-49.

"Indians"), are an offshoot of the St Vincent Caribs, whose language, and to some extent culture, they alone have conserved. Obviously, familiarity with such residual, broken, or transplanted cultures as these cannot replace an acquaintance with the early sources, but it can and does help to interpret the latter with a minimum chance of error.

These early accounts often differ, as Rouse remarks, from source to source; so that it is impossible to know where to place confidence until one has some knowledge of their authors' lives. The first French source on the Carib, Bouton's *Relation de l'Etablissement des Français en l'ile de la Martinique,* was written after a three months' stay in the West Indies; du Puis', and Armand de la Paix' accounts of the settlement of Guadeloupe, the latter largely inspired by Breton, after five years in that island. Rouse seems to have relied largely on Rochefort (in Davies' translation), and on du Tertre (la Borde and Labat came half a century later). The former was a Protestant missionary who was in the West Indies about 1650—where and for how long he does not tell us, though he admits to having got information from Auber (or Aubert), who had been Governor of Gaudeloupe, 1641-1643, and from Breton. Du Tertre, a Catholic priest, was in Guadeloupe on three occasions (1640-1642, 1643-1647, and what was almost a round trip in 1656-1657), on which he met a number of Caribs and became acquainted with Father Breton, whom he rates as *the* authority, not only on the language, but also on the culture of the Carib. Breton provided both du Tertre and Rochefort with information concerning Carib language and culture, returned the former's compliment by calling him the historian of the Antilles, but wrote of the latter's 1658 Rotterdam publication, "there is so much in it where he has followed what I gave him only in so far as he pleased;" and he cites fifteen words attributed to himself, which, he says, "ne sont point mots Sauvages."[6] Du Tertre was more outspoken, and said that Rochefort, whenever he could, had stolen from him, often turning him (du Tertre) into perfect nonsense in order to hide the theft. While such attacks are unlikely to be quite impartial, Breton's preëminence as ethnographer of the Carib must not be overlooked. Rouse says: "French missionaries made many attempts after 1650 to convert the Carib to Christianity, . . . Fathers like Raymond Breton and Philippe de Beaumont remained 25 years in Dominica."[7] Although this figure is an error on the part of Labat (1724), copied by myself (1938), and by Rouse in the *Handbook,* Breton is the only author whose account of Island Carib culture in early colonial times is based on what amounted to extensive field work, not to mention a knowledge of the lan-

6 Breton, *Dictionaire Caraïbe-Français,* Introduction, section 13.
7 *Handbook,* p. 548.

guage. One of the first contingent of priests sent to that island, he landed in Guadeloupe, as he himself tells us, "on the eve of the feast of St Peter and St Paul" in June 1635, first went to live among the Dominica Caribs in January 1641, "depuis lequel temps jusqu'à la fin de 1653 j'ai fréquenté parmi eux, avec quelque interruption," and finally sailed again for France early in 1654.[8] From the time of his arrival in the islands, he showed a keen interest in the Caribs' language, culture, and welfare; and his last thirteen years there were spent in long spells of living among them in Dominica, interspersed with trips to Guadeloupe, St Kitts (St Christopher's), and other islands. Philippe de Beaumont, who succeeded Breton in Dominica, appears to have left, on the Caribs, only a long letter in which he pleads that their extermination should not be pursued to the bitter end, and which resulted in the treaty of March 31, 1660, which he himself signed on behalf of the Caribs of Dominica, and by which English and French both agreed to leave Dominica and St Vincent to the Carib. Of the later Fathers, la Borde (1704) does not say how much personal experience he had with the Caribs, while Labat (1724), whose stay in the islands was a long one, mentions only a two weeks' visit in January 1700 to the Caribs of Dominica, who by that time were for the most part concentrated on the windward (eastern) side of the island. In Martinique, hostilities between Carib and white began in 1655, and by 1658 nearly all the former had been driven out of the island or killed. The census of April 12, 1683, showed a total of only 61 Caribs, including women and children, for the whole island; and according to Labat (1724), only one Carib family remained in all Martinique when he went there as parish priest of Macouba. So much for the relative value of our best known sources.

"The *Carib* name for the Arawak whom they conquered in the Lesser Antilles was *Igneri.*"[9] Breton does not give this name, though he has: "*Arrouagues, sont les ennemis de Caraïbes,* touálicha, f. alouágue." On the other hand, Ygneri (iñéri?) and its variants (igneri, eyerí, ieri), should be compared with Breton's "eyéri *homme,*" and with the present-day Black Caribs' eiéri, iéri, *man (vir),* in the language of the women.

"According to their traditions, they [the Carib] came into the West Indies no more than a century before the arrival of Columbus."[10] This statement also has been made, in substance, by a number of other modern authors, and I should be interested to learn its source. Breton relates one of their traditions, according to which the first Island Carib were mainland Galibis who had left the continent

8 Breton, *op. cit.,* p. 415.
9 *Handbook,* p. 545.
10 *Handbook,* p. 547.

to conquer the islands led by a Chief "small in body, but great in courage, who ate little, and drank still less"; and goes on to say how they told him that they had had kings in former times, and that the word *aboúyou* was the name given to those who bore the king on their shoulders.[11] Armand de la Paix says that they were unable to give a reasonable account of how they had left the mainland and come to the islands.

> Only that, they all say, their first Kallinago [Carib] father, having left the mainland accompanied by his family, settled in Dominica. He had a long posterity and saw the nephews of his nephews, who, in their extreme cruelty, killed him by poison. But he was changed into a fish of monstrous size which they call Akáiuma, and is still full of life in their river.[12]

It is certainly not such traditions as these which can fix the date of the Caribs' first arrival in the Antilles within a century.

Of the Black Carib, Rouse states: "In 1675 a cargo of Negro slaves was shipwrecked upon St. Vincent, and they intermarried with the Indians. This *Carib*-Negro mixture became most hostile to the Europeans, and so in 1795 the English moved them from St. Vincent, first to the small island of Balliceaux offshore, and later to Ruatán Island, near the coast of Honduras. . . ."[13] In Armand de la Paix' *Relation,* we find under the year 1646: "Some Negroes of Saint Vincent of the isles, being in Saint Lucia, massacred some French people from Martinique by the order of their Carib master"; while according to the Calendar of State Papers (West Indian Colonies) for 1667, the Island of St Vincent then contained "all Indians, and some Negroes from the loss of two Spanish ships in 1635."[14] The introduction of Negroes to St Vincent goes much further back, therefore, than the shipwreck of 1675; and perhaps even to Carib raids on Puerto Rico, antedating the French and English colonization of the Lesser Antilles. According to la Borde, the Negroes in St Vincent had become as powerful as the Indians there, by his day; while twenty years later (1719) the "Black Carib" were masters of the island, outnumbering the "Yellow Caribs" to an extent which, according to Bryan Edwards, had reached the proportions of ten to one before the end of the eighteenth century. They had been on friendly terms with the French, this author

11 Breton, *op. cit.,* pp. 229-230.

12 Armand de la Paix, in Rennard, p. 46. The former was head of the Dominican mission in Guadeloupe from 1643 to 1648, and reputed author of the *Relation de l'Isle de la Guadeloupe faite par les Missionnaires Dominicains à leur Général en 1647,* which was published in the latter's work.

13 *Handbook,* p. 548.

14 Armand de la Paix, in Rennard, pp. 108-109; *Calendar of State Papers,* 1661-1668, No. 1661.

tells us moreover, since long before his time; and their enmity toward the English, aroused by the latter's insatiable land-greed and temporarily dispelled by the treaty of 1773 (which assigned them the northern and more mountainous quarter of the island), had been subsequently re-awakened by the openly expressed intentions of many English colonists to dispossess them still further. Instigated and supported by the French revolutionary leader, Victor Hugues, war between the St Vincent Carib ("Black" and "Yellow") together with the "democratical whites" on the one hand, and the English together with their slaves on the other, broke out on March 10, 1795, and continued until, "before the close of November 1796, the Charaibes and their allies had all submitted, on the terms offered to them by the British commander." The narrative continues:

> The Charaibes, including women and children, were in number nearly 5000; and the whites and people of colour amounted to scarcely less than 1000. As, after what had passed, it was much to be feared that the colonists could never again rely upon the fidelity of their uncivilized neighbours, it was finally resolved to remove the Charaibes from the colony, and they were in consequence conveyed with their families to the Island of Rattan [*sic!*], in the Bay of Honduras.[15]

Rouse continues: "The *Carib* who remained in the West Indies also intermarried somewhat with the Negroes. They continued to reside in Dominica and St. Vincent until the end of the 19th century, when they were moved to a reservation in Dominica."[16] The present *Carib Reserve* in Dominica was created in June 1903 by enlarging the boundaries of what for long had been the largest remaining Carib settlement in the island. As far as I know, no enforced removal of Caribs took place; and there are still several patches of "Carib lands" outside the *Reserve*, on which Carib families or descendants of Caribs are living today. Certainly, neither then nor at any other time were Caribs moved from St Vincent to Dominica.

"The period covered is that from 1650 to 1700. . . ."[17] Rouse nevertheless speaks of coconuts and limes, tortoise-shell fish-hooks and clay griddles, as if these things were contemporaneous, which is unlikely. Breton saw only two coconut trees (which the Caribs called palma, from the Spanish word for palm) in the whole of Dominica; and considered them rare enough to take and plant a nut at Basse Terre, Guadeloupe. As for limes, he says expressly: "they [the Caribs] hardly use them." Of turtle-shell fish-hooks, the 1647 *Relation* says: "On en voit encore chez eux, quoi qu'ils ne s'en servent plus."[18] On the other hand, as

15 Edwards, *History*, vol. 4, pp. 73-74.
16 *Handbook*, p. 548.
17 *Handbook*, pp. 549-550.
18 Breton, *Dictionaire Caribe-Français*, p. 297; Armand de la Paix, p. 68.

the Spanish loan-words employed by the Carib of Breton's day show, they had already become familiar with iron, nails, wire, etc.

Rouse derives Columbus' "caribales" from "the term *Calinago* or *Calino.*"[19] Breton gives: Callínago (Breton's *ll* probably approaches an apical *r;* while omission of the collective suffix, -go, would give Callina) as the men's, Callíponam [karíponā] as the women's name for their tribe or nation. The form "caribales" is more likely to have come from the latter than from the former term.

"*Carib* men and women had certain differences in language, which may have been due to the fact that many of the women had been captured from the *Arawak.*"[20] The persistence of such differences among the modern Black Carib of Central America (as also, by all acounts, among the last native speakers in Dominica and in St Vincent), would be hard to explain on similar grounds. Rouse seems to be unaware of the fact that, by Breton's time at least, the Cariban dialect of the Igneri's former conquerors had been reduced, in the speech of the Lesser Antilles, to much the same part as had Norman French, by Chaucer's day, in that of post-Conquest England. Therefore, although the Dominica Carib told Breton that they and the Guiana Galibi were of the same descent, their language was already basically different: "Le langage de nos Caraïbes est différent de celui des Gallibys de terre ferme"; and "Diversa utrisque linqua, licet illi ab his descendisse in Insulas dicant."[21]

"No estimates of the original population of the *Carib* islands have been discovered."[22] Nevertheless, the 1647 *Relation* speaks of the Caribs being "quite four or five thousand" in Dominica, and "sans nombre" in St Vincent; and elsewhere comments:

> It perhaps be asked why there are so few of them, especially in view of the multitude of their women. They tell you that it is on account of the Christians; for, as one of them told Father Raymond, the Spaniards twice massacred all the Savages of the island of St. Christopher; and once those of Guadeloupe, of whom there escaped only one woman and her children who ran away to the mountains, and, so they say, bred there. They tried to do the same in Dominica, and managed to kill quite half of those there. Since then they have been decimated by small-pox, which they call variola, and of which some died rotting, being still ignorant of any cure for this disease. Moreover, everybody captures and carries off or kills them: Flemmings, English, Spaniards, and their Allouagues, who are their enemies.[23]

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19 *Handbook,* p. 549.
20 *Ibid.*
21 Armand de la Paix, p. 49; Breton (?), p. 132: both in Rennard.
22 *Handbook,* p. 549.
23 Armand de la Paix, pp. 112 and 48.

Later estimates are, for St Vincent: Philip Warner's "3000 Negroes and no other island as many Indians," and Stapleton's "1500 [warriors], 600 of these bowmen are Negroes," both taken from the Calendar of State Papers for the year 1676.[24] These figures may be compared with la Borde's estimated 4000 in 1700 for the two islands of Dominica and St Vincent together, i.e., after two attempts by the British under Stapleton in 1683 to exterminate the Caribs in both islands.

"The staple food of the *Carib* was the crab. . . . They roasted the meat, seasoning it with a sauce called taumalin, a mixture of lime juice and pounded peppers with the greenish meat next to the shell of the male crab. . . . For the seasoning of fish and meat they used a sauce called coui, which was made by boiling the juice of manioc with crushed peppers, lime juice, and manioc flour."[25] As the Carib word for food does not include fish, meat, or game, which may be called by a term meaning *food adjuncts*, crab—fond of it as the Caribs were and still are—cannot properly be called their staple food, which was and is cassava, a bread or bannock made from manioc meal. Incidentally, the manioc shrub is propagated by cuttings of two or three feet long taken from the stem of an old plant, and not, as Rouse would have it in speaking of the Arawak, from the root.[26] The Carib may have taken to citrus fruits before 1700, but neither the sauce which the modern Carib call [tumálē] in Dominica and [dumári] in Central America, nor that known to Breton as "tóma *sausse*, nitomáliem *ma sausse*," calls for the employment of lime juice as an ingredient. Breton says "it is so called because the women usually make it with tomali of crab, which is oily"; and he refers us to "carïouati *poivré*," where we find:

> They put into a little earthen pot together with mouchache [that is, manioc starch], forty or fifty peppers [*Capsicum frutescens*] as big as the thumb, fish-scales, fish-bones, or the bones of agouti which they have gnawed, boil the lot in manioc-water (which is poisonous), and that is the sauce in which they dip their cassava (when they have nothing else). . . .[27]

The name of this sauce has been incorporated into the English language as "toma·ll(e)y, n. Soft greenish substance (called the liver) in lobster, used as sauce. (Carib)." (Concise Oxford Dictionary). Such sauce would naturally be served in the receptacle still known in the West Indies as a coui [kuí], and made from the half of a calabash (cujete)[27a] cut in two lengthwise. Although this is one

24 *Calendar of State Papers*, 1675-1676, no. 861, and p. 499.
25 *Handbook*, p. 550.
26 *Handbook*, p. 522.
27 Breton, *Dictionaire Caraïb-Français*, p. 109.
27a *Crescentia cujete*.

of the words black-listed by Breton as "point mots Sauvages," he himself gives what is probably the parent Carib form under "*coui à boire* couáikeu," phonetically ['kwɛ̃kɛ̃].

Rouse omits to mention two important classes of kitchen utensils: the mortar (ánna), and the manioc trough (batáia), both carved out of single pieces of wood, the latter being just as important to the manioc complex as the stone-chip grater (eše), the basketry squeezer (rukúma) and sifter (híbiše), and the cassava-plate or griddle (butáli).

"Corn, sweetpotatoes, yams, beans, and peppers also were cultivated, the corn being made into bread as among the *Arawak*." Rouse elsewhere mentions corn beer.[28] Corn is and apparently always was of very secondary importance to the Carib, and it seems doubtful whether the Carib ever made much use of bread or beer made from it. Breton has this to say about it:

> After it has grown, that is to say two months after it has been sown, the Savages gather and roast it on the coals, then eat it. The Galibi make from it a fermented drink which is not inferior to beer. The French use it to feed poultry, while some turn it into flour, which they mix with an equal quantity of wheat flour, and make with this a fine bread which tastes quite good.[29]

Breton elsewhere describes at length the making of cassava-beer (uéku), and speaks of a beverage of boiled cassavas in connection with the couvade. On the other hand, the only use made of corn by the modern Dominica Carib is that described in the first sentence of the above quotation from Breton. Botanists usually describe yams (*Dioscorea* spp.) as of Old World origin, but it now seems certain that a species of *Dioscorea trifida,* known to the Carib as kúšu, and formerly much employed by them, was American. Two other food plants, not listed by Rouse but fairly important to the Carib of Breton's day and at the present time, are *Xanthosoma* spp. (uáho) and pumpkin (uauáiama). By "guayba," Rouse presumably means *guava,* Carib: kuiábu.

We are told that hammocks were "made of a network of cotton thread," and that "the weaving of cloth may not have been an original part of Carib culture. The women had wooden spindles for making thread and used belt looms for weaving it. They stretched the warp threads from a stick on one side of the house to a stick on the other; then two women wove in the weft, beating the threads down with a sword shaped stick."[30] Breton, on the other hand, describes the

28 *Handbook,* pp. 551-557.
29 Breton, *op. cit.,* p. 355.
30 *Handbook,* pp. 552, 555.

weaving of hammocks on a heavy frame, similar to that employed in Guiana today, and which leaned against the wall of the house. He says:

> The Savages cut four big, round, smooth pieces of wood; two of which they lean and secure against the house-runners, while the two others are bound tightly across them, one above and one below, in proportion to the size of the bed, and around which the women arrange their cotton thread, which they handle skillfully, but without hurrying themselves over it. They leave half a foot unwoven at both extremities, and this they divide into little bundles, through which they attach a little cord called ebenebu, then bend it back at arm's length and pass it through another bundle, bend it again, and so on to the last bundle. Then they pass a stouter cord through the upper bends of the smaller cord, and this is the one by which they hang it wherever they may be to protect themselves from snakes and ants and other harmful beasts.[31]

Labat describes Carib hammocks seen some fifty years later as "une pièce de grosse toile de coton"; and goes on to say how, once the warp was set up, the women were

> obliged to pass their ball of thread under and over the warp threads, one after another, and to beat the weft down with a sort of knife made of heavy hard wood so as to make all the threads get into their places and render the work even.

From the above it would appear that heddles were not in general use; but la Borde speaks of a "roller" at the bottom of the frame, which the women turned as the weaving progressed, and states explicitly that the ends of the warp threads were left unwoven, and were not cut on completion of the hammock. From the above descriptions, as well as from modern Guiana practice, it is evident that this referred, *not* to a cloth-beam, but to a head-stick, which must have been employed, as otherwise the hammock would have had to be cut on completion, and there would have been no bundles of loops through which to pass the "little cord."

"The paint, urucú (roucou), was made by mixing oil with boiled and ground seeds from the bixa plant."[32] *Bixa orellana* L., Carib: kuséue, in the men's, and: bíše, in the women's speech, is a small tree. The dye is obtained from the waxy red aril surrounding each of the seeds, which are clustered in a sort of pod. After boiling, according to Breton, the water was allowed to cool and the seeds rubbed between the hands to remove this aril, which then settled at the bottom of the water in the form of a waxlike cake. The prepared paint, known as šurúkuli or

31 Breton, *op. cit.*, pp. 192-193.
32 *Handbook*, p. 552.

urukámbui, "closes the pores, prevents the seawater from drying on their skins, keeps off mosquitoes, and kills chigoes."[33]

Carib basketry was and still is made from *Ischnosiphon arouma* (Aublet) Koernicke, the "ouallóman" of Breton's or the uarúmã of our own time and spelling, and not, as Rouse says, from "Latania" (presumably an anglicization of French latanier, from Carib alátani, which is the small fan-palm, *Coccothrinax martinicensis* Beccari), whose leaves served as thatching and for making rough sunshades, umbrellas, bags, etc., but could not possibly be employed in the typical wicker pattern and twilled basketry of the Carib. As in Breton's time, so today Carib baskets have a double wall and cover like those of the Taino described by Rouse,[34] but such baskets are and may be rendered waterproof only by the insertion of one or more intermediary layers of leaves. The *Mytilus edulis* is not found in the Lesser Antilles today, and it seems probable that the "mussel" whose shells were used, according to Rouse,[35] in scraping strands employed for basketry, refers to some other species.

Although it may not be possible, as Rouse says, to substantiate Gower's statement that descent was matrilineal among the Island Carib, this feature is at least implicit in the kinship terminology.

Breton is in disagreement with Rouse's authorities on several points concerning the life cycle. Of a husband's relations with his wives, he says:

> they [the wives] have their turn month and month about, even when they are pregnant; after childbirth they [the husbands] remain without seeing them for a good while, for fear of harming the child.[36]

In seeming contradiction, Rouse says that sexual intercourse was forbidden during pregnancy, and does not mention post-puerperal abstinence.[37] The solution may perhaps be found in the attitude of the modern Carib father, who says that while abstinence during pregnancy is a matter of taste, intercourse during the forty-day period following birth would be injurious to the child. Rouse notes that the accounts of the couvade vary considerably, his own being "taken largely from Davies, with supplemental data from La Borde:" "For several days after birth the mother fasted, eating only dried cassava and drinking warm water. The father, on the other hand, practiced the couvade. Immediately after the birth he com-

33 Breton, *op. cit.*, p. 79.
34 *Handbook*, p. 527.
35 *Handbook*, p. 554.
36 Breton, *op. cit.*, p. 278.
37 *Handbook*, p. 557.

plained of pains, went to a separate hut, and lay in a hammock."[38] Breton has answered this last statement by saying: "it is not likely that the husband should cry out like a woman in labour; on the contrary, I've seen them come from without, secretly and stealthily, a month after the birth, in order to make their retreat and fast."[39] This is, at least, more in accordance with all modern reports of the custom. Moreover, it is disconcerting if not misleading to insist upon the "otherness" of the father's part, after rightly noting that the restrictions affected both parents; especially since precautions similar to those characterizing the Carib's "couvade" were also taken at puberty, after the death of a relative or the slaying of an enemy, and by candidates for chieftaincy or shamanship. Breton nowhere mentions any special taboo on the names of the dead, while la Borde merely says that they were avoided so as not to evoke thoughts of death. The former does say, however, that names were not used as forms of address to any but children; and that everybody's real name was kept secret from all but intimates. And, while Breton mentions that his wife was the only woman who might eat with a man, his failure to report that even this was limited to the occasion of their marriage suggests that there was no hard and fast rule about such matters. A summary cannot include everything; but the studied omissions or contradictions of a man like Breton, who had read, before publishing his own work, the accounts of Armand de la Paix, du Puis, du Tertre, and Rochefort—all of whom had sought and obtained his advice and help—cannot well be ignored. My own article on the *Kinship and Social Structure of the Island Carib* resumés some of these points at greater length.[40]

Perhaps the most unsatisfactory part of the whole summary of Carib culture is the section on "Religion and Shamanism,"[41] which perpetuates the myth that the Carib invoked and made offerings to "the evil spirits (maboya)." Already Breton protested (and in the matter of religion, at least, he cannot be accused of prejudice in the Caribs' favor) that "There is in the belief of the Savages as much difference between Ichéiri & Mápoya as between God & devil among ourselves; and it is unheard of among them that any one should offer sacrifices to mápoya,"[42] while la Borde notes: "Ils craignent Máboia, mais ils ne lui rendent aucun culte." Thirty-five years ago Roth, in his *Animism and Folk-Lore of the Guiana Indians,* argued conclusively against this somewhat mischievous concep-

38 *Ibid.*
39 Breton, *op. cit.,* pp. 373-374.
40 Taylor, *Kinship and Social Structure; Carib Folk Beliefs.*
41 *Handbook,* pp. 561-563.
42 Breton, *Dictionaire Caraïbe-Français,* pp. 283-284.

tion. Breton makes it quite clear that the offerings were made to the spirits which he calls "*Dieu* Ichéiri, Iouloúca, f. Chemiin," who were, in fact, spirit-helpers of both sexes, different ages, and having belonged in life to divers nations on earth. If he does not further identify the foregoing with "*esprit* acansáncou, acámbouée, *f.* ópoyem *ou* oupoyem," nor speak of the body-part origin of these and of the mápoya and oumécou, it is doubtless because he lacked conclusive evidence of such beliefs. Five of the above Carib terms are employed by the modern Black Carib: the hiúruha (Breton's iouloúca) require no other definition than that given above, and are "owned" and invoked by búiai (shamans), and presented with offerings of food and drink as in days gone by. The áhambue (Breton's acámbouée) are spirits of the dead, and are now distinct from úfiẽ (Breton's oúpoyem), which is these people's name for a ghostly apparition emanating from a "bad person" who is dead. The máfia (máfuia, with the old people, and identical with Breton's mápoya) are malevolent bush-spirits, while the úmeu (Breton's oumécou) are mischievous but not very dangerous spirits frequenting the shore and tidal waters of the sea. There is no orthodox belief as to the origin of the last two; but rites to propitiate the hiúruha, as well as the spirits of the family dead, are still performed, though Creoles and other non-Caribs (to the indignation and scorn of the Carib themselves) still refer to them as "devil dances" or (in Spanish) "baile mafia."

Such rites and feasts as Breton describes certainly took more than "several days" to prepare,[43] and Breton speaks of four months in this connection. From him it appears, moreover, that except for six or eight befeathered functionaries who danced in couples, side by side and holding one another by an arm placed around the other's neck, the people danced singly, and not "arm in arm" as Rouse says.

Rouse cites a certain number of Carib terms, and for these at least one would expect Breton's dictionary to have been consulted. Thus, he states: "The sun (noun) was considered a male. . . . The moon (houiou) was female. . . ."[44] Breton gives huéyou (and, in the women's speech, cachi) for the *sun;* nónum (and, in the women's speech, cati) for the *moon;* treats both as masculine, and of the second says specifically: "So is *nónum* [masculine], when it means the moon, because they believe that it is a man." Also la Borde says: "They make the moon masculine, and call it *nónum.*" The story of the incestuous brother who became the moon, and of his son Hiali (to be found in the dictionary under "ieréttê"),

43 *Handbook,* p. 561.
44 *Handbook,* p. 564.

is still told by the modern Dominica Carib, who also remember the terms huéiu *sun,* núnũ *moon,* although they no longer speak the language; while the Black Carib employ uéiu *sun,* háti *moon,* both masculine. Breton's qualification ("when it means the moon") refers to the fact that this same Carib word was also employed for the *earth.* Other forms cited by Rouse, such as boyez (shaman) and Savacou (species of heron and name of constellation), are more misleading than Breton's bóye and chaouácou, since the sounds *z* and *v* did not occur in the Island Carib of the seventeenth century and later, any more than in its modern offshoot. This may seem like carping, but it is unscholarly to cite Carib forms without consulting the only author among the early sources who spoke the language.[45]

Although no ball-courts have been reported from the Lesser Antilles, and while it is probably correct in one sense that "The *Carib* lacked the ball-game," as Steward says in his introduction,[46] yet it is evident that *some* ball-game was played by them in Breton's time, since he lists in his dictionary "Atalouacayem *jouer à la paume, la renvoyer";* and, in the French-Carib section "*paume, balle,* ou *balon à jouer* tibouele; *allons jouer à la paume* caíman ouábouyacoua."

One misses at the outset of the part devoted to the West Indies a good map, such as is given for practically every other region treated throughout the *Handbook.* The sketch-map on page 498 does not distinguish the islands of the Lesser Antilles by name, nor show their relative positions and sizes with even approximate accuracy: what I suppose to be Gaudeloupe (600 square miles) appears to be about one third the size of what is certainly meant for Tobago (114 square miles).

The above criticisms are in no wise intended to be derogatory of the author of this part of the volume, or of his work; but are meant to point out the dangers of too great an eclecticism, or of too hasty an evaluation of such chroniclers as those who wrote in early colonial times. It is only natural that sources on the Carib have, as Rouse admits, relatively more ethnographic material than those, more numerous, on the Arawak Taino. Linguistically the former group had more, and racially and culturally as much, in common with the Arawak Igneri than/or as with the continental Carib tribes; yet one sometimes cannot avoid the feeling, in reading through this part of the volume, that Rouse—perhaps unconsciously—has selected and presented his data *ad majorem Aruake gloriam.*

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45 See my *Notes on Star-Lore.* Other confusing spellings copied by Rouse are achinoin, ichieri, oumicou, as compared with Breton's achínnao, ichéiri, oumécou. In other than Carib words, he gives both "ginipa fruit" and "junipa nut," both presumably referring to *Genipa americana;* and "Lambys" for lambi (labi), the French name for the *conch.*

46 *Handbook,* p. 26.

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Dominica
British West Indies

ARCHAEOLOGICAL SURVEY IN SOUTHEASTERN UTAH[1]

GORDON C. BALDWIN

INTRODUCTION

IN OCTOBER, 1945, the writer conducted a brief archaeological survey of the region west and northwest of Blanding, Utah, with particular emphasis on the Beef Basin, Fable Valley, and Dark Canyon Plateau areas north and west of Elk Ridge.[2] This survey was undertaken as a part of the general survey of the recreational resources of the Colorado River basin, a study carried on by the National Park Service at the request of the Bureau of Reclamation.

Since this section of southeastern Utah has witnessed relatively little archaeological survey or excavation, with a corresponding scarcity of published articles, it was believed desirable to place on record the following brief notes concerning the prehistoric remains of this area for the benefit of archaeologists working in this or adjoining regions.

Geologically, this region represents the northern part of the general Colorado Plateau province which extends along the Colorado River for several hundred miles north and south of the Utah-Arizona boundary. Massive formations of various types of red and white sandstone have been cut into huge mesas and tablelands by numerous deep, steep-walled canyons, with frequent open parks or valleys. The long narrow, north-south trending Elk Ridge is the most conspicuous topographical feature, and forms the eastern boundary of the area under discussion. From its western slopes drain a number of major washes and canyons, including Beef Basin, Fable Valley, and Dark Canyon, which eventually find their way to the Colorado River. Elk Ridge itself forms a part of the divide between the main Colorado River to the west and the tributary San Juan River to the south and southeast, with such major and well-known water courses as Cottonwood, Butler, Comb, and Grand Gulch heading in or near the ridge and flowing south to the San Juan. The major part of this area lies at elevations ranging from 5500 to 7500 feet above sea level.

Heavy stands of western yellow pine cover the higher elevations and extend down the side canyons until they are replaced by piñon and juniper. About the edges of the numerous open sage-covered parks are scattered clumps of cotton-

1 Published with the permission of the Director, National Park Service.

2 Members of the party included Messrs Frederick L. Olmsted, George W. Olcott, George Grant, and Cardon Jones, Dr H. E. Gregory, and the writer.

wood and willow. Small springs in most of the canyons provide a perennial water supply.

Wild game is plentiful throughout the area even today, and undoubtedly was very abundant in prehistoric times. Brew[3] lists a number of birds and mammals, including deer, elk, and mountain sheep, recovered from the excavations at Alkali Ridge, forty miles to the east, and most of these probably occurred in this area also. In addition, there is a possibility that bison once lived in this region: a petroglyph on the Colorado River at the mouth of the Fremont appears to be a definite likeness of that animal, since it depicts the large head and short curved horns that are so characteristic of the bison.[4] Gregory also states that the Paiute Indians speak of a large, hairy cow-like animal that strongly suggests the bison.[5]

Before the present cycle of erosion began some thirty to forty years ago these canyons, plateaus, and valleys, and even the higher mesa tops would appear to have offered excellent opportunities for a sedentary people. All the necessary ingredients, including wild game and wild plant foods, wood, building stone, water, and fertile land, were here in great abundance.

PREVIOUS INVESTIGATIONS

As mentioned earlier, the region north and west of Elk Ridge has seen very little archaeological survey or excavation and almost no publication of the results of such projects. While there has been a considerable amount of survey and excavation to the south and east along the northern tributaries of the San Juan, the following statement made by Kidder in 1924 still holds true: "Unfortunately the study of the antiquities of the district is still very incomplete."[6] In spite of the recent excellent work of Martin[7] and Brew[8] in the upper San Juan area, our knowledge of the basic features of this important area is still lacking in many details, and this despite the fact that there are perhaps more archaeological sites in this region than in any other area of equal size in the entire Southwest.

The listing of previous archaeological expeditions into the Beef Basin-Dark Canyon Plateau area and immediately adjacent area is extremely short. In the summer of 1907, Dr Byron Cummings, at that time connected with the Univer-

3 Brew, *Archaeology of Alkali Ridge*, pp. 12-13.

4 Steward, *Petroglyphs of the United States*, p. 416, figure 2f.

5 Gregory, *San Juan Country*, p. 27.

6 Kidder, *Southwestern Archaeology*, p. 64.

7 Martin, *Lowry Ruin, Archaeological Work in the Ackmen-Lowry Area*, and *Modified Basketmaker Sites*.

8 Brew, *Archaeology of Alkali Ridge*.

sity of Utah, made the first of many archaeological trips into the San Juan area, exploring in Montezuma Canyon and about White and Armstrong Canyons to the southwest of Elk Ridge. In November 1909, Dr Cummings spent three weeks in exploring and mapping Beef Basin, Fable Valley, and Ruin Park, and made the following comment concerning the ruins of this area:

> In Fable Valley are some excellent cliff and pueblo ruins from which we obtained fine specimens of pottery. Also in Fable Valley were found many ruins of old rock towers 15 or 20 feet high. In Beef Basin are very extensive pueblo ruins with quite large rooms and one or more high towers within each group. These towers are rectangular and sometimes circular and a few of them stood 16 feet in height.[9]

So far as the writer knows this was the first and only scientific archaeological exploration and survey of the Beef Basin-Fable Valley area. It is unfortunate, however, that a number of things have prevented the publication of the results of this survey. Dr H. E. Gregory led a number of geological survey and mapping parties into the region during the following years, but these expeditions could devote very little time to the study of archaeological features discovered. However, notes were made and photographs taken of a few ruins.[10] In 1932, Dr Julian Steward made an archaeological reconnaissance by boat down the Colorado River from the Dirty Devil River to Lees Ferry, briefly touching the extreme western edge of the area under discussion.[11] In 1936, Mr Charles Steen of the National Park Service investigated and partially excavated a number of ruins in the vicinity of Blanding and the Natural Bridges National Monument.[12] In 1946 there were two short exploratory expeditions that touched the fringes of the area, one in Indian Canyon to the northeast and the other in Dark Canyon at the southern edge of Dark Canyon Plateau.[13] These briefly mention and describe a number of cliff structures and petroglyphs.[14]

Aside from these expeditions, which have largely been in adjacent areas, there has been no scientific study in this region, although from the number of ruins that show signs of digging, it is evident that pothunters, including a number of unauthorized expeditions, have been active in certain sections for some time.

9 Cummings, *Ancient Inhabitants of the San Juan Valley*, and personal communication, March 1946.

10 Gregory, *The San Juan Country*.

11 Steward, *Archeological Reconnaissance of Southern Utah*.

12 Steen, *Archeological Investigations*.

13 Henderson, *Glyph Hunters* and *We Explored Dark Canyon*.

14 In addition, it was recently learned that the Carnegie Museum (?) made at least two reconnaissance trips into the Fable Valley area during the period from 1945 to 1947.

SCOPE OF 1945 SURVEY

Due to the hurried nature of the trip and to other phases of the recreational aspects of the region that had also to be investigated, comparatively little time could actually be devoted to archaeological exploration. Since the time factor had always to be considered, only those sites which were located on or directly adjacent to the trail could be studied.

Thus, out of a total number of seventy-two archaeological sites definitely located in the Beef Basin-Dark Canyon Plateau area, only forty-six were actually visited so that surface collections and other necessary data could be secured. The twenty-six sites not surveyed consisted mainly of small cliff dwellings and surface ruins located at some distance from the trail but seen with the aid of field glasses. Undoubtedly hundreds of other ruins occur in this region, since only a small fragment of the area was covered. For example, none of the larger ruins that Dr Cummings notes from Beef Basin were seen at all and only a few of those he describes from Fable Valley.

Practically all of the archaeological sites visited belong to the Pueblo culture, either Developmental Pueblo or Great Pueblo. Although Basketmaker ruins have been reported from this area, no definite Basketmaker sites were located. This was due partially to the limited scope of the survey, but largely to the fact that only caves and other places showing definite signs of structures were visited. Many other caves with no visible habitations were sighted, and there is a good possibility that some of these contain Basketmaker remains. Fragments of Basketmaker pottery did occur, however, in several of the ruins that were investigated.

The forty-six ruins that were actually surveyed can be grouped into the following general categories: cliff pueblos, large open pueblos, unit-type dwellings, granaries, rock shelters, open camp sites, and petroglyph areas, the first three being the most common. All sites noted were recorded on form sheets and surface collections of potsherds and other artifacts secured from those sites visited.[15] Since only a small amount of the surface material gathered has as yet been adequately studied, only very general statements can be made concerning the archaeology of this region as exemplified by the ruins investigated.

BEEF BASIN

Although only eighteen archaeological sites, ranging from small camp sites and rock shelters to cliff dwellings and large open pueblos, were located along

15 All records and material recovered from this survey are on file at the Lake Mead Recreational Area Museum, Boulder City, Nevada.

Beef Basin Wash, undoubtedly many more occurred in that area. Since only a small fraction of the basin was traversed, none of the extensive pueblos or the circular and rectangular towers that Dr Cummings mentioned was noted, nor was there time for investigation of the many ruins known to exist in Ruin Canyon and other tributary canyons coming in from the south. Of the nine sites actually visited, three are of sufficient size and importance to warrant further comment.

Utah W:1:1. This consisted of a three-room cliff dwelling in a shallow cave located in the west wall of a large open park near the eastern end of Beef Basin. Entrance to the cave was by means of a long covered passageway between two of the rooms and leading up to the back of the cave and emerging on the upper or roof level. Rectangular side entrances occurred in two of the rooms and a square roof entrance in the third. A low parapet, pierced with a number of holes, had been built along the upper edge of the front wall. The masonry of this structure is similar to that of the majority of the ruins found and the following description will apply equally well to all. Wall construction on the whole is quite good, with well-shaped sandstone slabs laid in clay in more or less even courses. However, in some of the interior walls and in the walls of a number of the one- or two-room dwellings rather rough stone and considerable quantities of clay were frequently used. The few sherds recovered represented a number of different types of corrugated gray wares, including Tusayan Corrugated, and several small fragments of what appeared to be Mancos Black-on-White.[16]

Utah W:1:8. About five miles to the west and situated on a low bench just above the wash was a small unit-type pueblo. The tumbled rock walls of five rooms are visible, three contiguous rectangular rooms extending in a north-south line, with a detached rectangular room thirty feet to the northwest and a small sunken circular room, possibly a kiva, about the same distance to the northeast. One rather unusual feature of these walls was the use of quite large slabs of rock set on edge. Potsherds were abundant and consisted of plain gray, Tusayan Corrugated, and Mancos Black-on-White.

Utah W:1:14. Near the western end of Beef Basin, on a bench above the southern side of a small hill, is an extremely interesting series of small pueblos. Several isolated groups of from two to five rooms each are scattered along the eastern end of the bench, with at least one unit of rooms on the top of the hill. However, the main group consists of a roughly circular subterranean room over fifty feet in diameter, with a number of rectangular rooms attached to the more

16 Description of all named pottery types discussed may be found in Colton and Hargrave, *Handbook of Northern Arizona Pottery Wares*, Beals, Brainerd, and Smith, *Archaeological Studies in Northeast Arizona*, or Martin and Willis, *Anasazi Painted Pottery in Field Museum*.

or less straight southern side. What appears to have been a broad entrance leads into the circular room between two of the small rectangular rooms. The size and shape of this structure would seem to indicate a Great Kiva. Pottery was abundant and consisted of various types of corrugated and black-on-white wares. The former included examples of plain coil, wavy indented, plain indented, and indented in designs, the majority of which are probably closely allied to Tusayan Corrugated. The decorated sherds can probably all be allocated to various grades of Mancos, McElmo, or Mesa Verde Black-on-White. One Mancos Black-on-White potsherd had a corrugated exterior. A single sherd of St Johns Polychrome is of special interest because this type was one of the most widely traded of all pottery types during the Great Pueblo Period. So far as the writer knows this represents the most northwesterly appearance of this type.

AREA NORTH OF BEEF BASIN

One day was spent investigating the area just north of Beef Basin. Of the twelve sites surveyed all except three were temporary camp sites or rock shelters. The situation of a number of these camp sites had palpably been fixed by the presence of great quantities of chalcedony weathering out of the underlying formation. At several of these sites literally thousands of chips and rejects covered the ground for several hundred yards. The following description of four of these sites will serve to illustrate the archaeological remains occurring in this section of the area.

Utah R:13:4. This was a small one-room masonry structure on the north side of a large open flat. An unusual feature of construction was the use of four large rock pillars, about five feet in height, set on end as corner posts or braces for the regular rock wall laid in between. The few potsherds found were mainly plain gray and Mancos Black-on-White. On the cliff a short distance north of this structure was a small group of petroglyphs, the first seen in the area.

Utah R:13:8. Approximately one mile north of the above-mentioned site on a series of terraces at the base of a long sandstone ridge were a number of rock shelters and walled up storage recesses and at least one small pueblo. The latter is located on the lowest slope or terrace in a rather heavy sand deposit which appears to have covered the greater part of the site. The only structure now visible is a small slab-lined, covered storage bin eroding out of the side of a small wash cutting the edge of the site. Potsherds were fairly numerous and included plain gray, Tusayan Corrugated, Mesa Verde Black-on-White, and three sherds of Tusayan Polychrome. One of the corrugated jar sherds had a small flat loop-

handle extending from the rim to the upper shoulder. Most of the black-on-white bowl rim sherds show black decoration on the rim in the form of dots, rectangles, or parallel lines.

Utah R:13:9. On the bench immediately above this site was another small camp site and rock shelter, with several partially walled-in storage recesses. Most of these were too small to have served for human occupation and probably were utilized for the storage of food and other articles. Potsherds were limited to a few fragments of plain gray, gray corrugated, and Mancos Black-on-White.

Utah R:13:10. The highest bench contained a few small rock shelters and a large series of petroglyphs. Geometric designs predominate, although there are a great many drawings of elk, deer, and mountain sheep and several human figures as well (Plate 1, A). The only specimens of pottery occurring on the bench were one corrugated gray sherd and three small pieces of what appeared to be Mancos Black-on-White.

FABLE VALLEY

In the short four mile section of Fable Valley investigated, twenty-four major ruins were noted, representing the heaviest concentration of sites in any one area, and doubtless at least that many more were entirely overlooked. This is a very broad valley hemmed in by high sandstone cliffs; the valley floor is thickly covered with sage, while clumps of juniper and piñon dot the upper slopes. A number of springs in the short side canyons form an excellent water supply and, at the time of the present survey, water was flowing down the main canyon. With excellent agricultural lands, with plenty of available timber, and with an abundant water supply, this valley undoubtedly supported a rather large population during the Great Pueblo Period. Of the twenty-four sites surveyed, fourteen were small, one- to four-room cliff dwellings, four were rock shelters, and the remainder were medium to large valley pueblos. Three of these sites are of sufficient importance to warrant further mention.

Utah W:1:24. About three miles up Fable Valley from its junction with Beef Basin Wash, on the east side of the stream, was a small unit-type pueblo situated on top of a round knoll. Approximately nine rectangular masonry rooms were arranged in a rough quarter-circle facing south, with three additional rooms forming an inner tier in the center. A short distance to the south a circular depression eighteen-twenty feet in diameter marks the location of a kiva and a few feet farther south were the remains of what appeared to have been the stone-lined ventilator opening. Potsherds included plain gray, Tusayan and Moenkopi Corrugated, and Mancos and McElmo Black-on-White.

Utah W:1:34. On the east side of the valley about one mile above Fable Spring is situated the most extensive pueblo ruin seen in the entire area. This site, roughly rectangular in shape, seemingly contains more than two hundred rooms and probably stood at least two stories in height over a part of the pueblo. One corner wall still standing to a height of seven feet may represent all that remains of one of the rectangular towers noted by Dr Cummings almost forty years earlier. Just north of this tower and extending nearly to the northeastern edge of the ruin mound is a stone-lined circular depression more than fifty-five feet in diameter. This structure probably represents another example of a Great Kiva. Along the western and southern sides of the mound several tiers of rooms have been partially excavated by pothunters or others at some time in the past. A considerable amount of broken pottery was present at this site and a representative series of 109 sherds was collected, consisting of 10 plain gray, 40 corrugated, 51 black-on-white, and 8 redware. These included Tusayan and Moenkopi Corrugated, Mancos, McElmo, and Mesa Verde Black-on-White, Tusayan Black-on-Red, Citadel Polychrome and Tusayan Polychrome.

Utah W:1:35. In the eastern wall of the canyon directly above this large pueblo was a rather large cave with a small cliff pueblo. Although this ruin was small, consisting of only five definite rooms, yet it was the largest cliff dwelling visited in the area northwest of Blanding. Two of these rooms were placed at the front of the cave facing inward, their back wall forming a partial wall across the front of the cave. The remainder of the cave opening, with the exception of a main entrance way at the north end, was blocked by a six foot high masonry wall pierced with a number of small square openings. The outer wall of the two front rooms also had several of these openings which could have served for defense purposes. The remaining three rooms were built against the back wall and roof of the cave and were semicircular in shape. A section of a broken wall possibly indicates a sixth small semicircular storage chamber. All entrances were rectangular side doorways, except for one T-shaped doorway. A hundred feet to the right and on a slightly lower shelf were two single rooms that were probably contemporaneous with the main cliff pueblo (Plate 1, B). Pottery was abundant and similar to that from the large pueblo on the valley floor.

DARK CANYON PLATEAU

Considering the nature of the terrain on Dark Canyon Plateau—a high sage- and forest-covered plateau deeply cut by washes and canyons—and the limited amount of water and agricultural lands available, pueblo ruins were not expected to be either numerous or large. Consequently, it was a pleasant surprise to locate

A

B

ARCHAEOLOGICAL REMAINS IN SOUTHEASTERN UTAH

A. Panel of petroglyphs at Utah R:13:10. B. Outlying rooms of Utah W:1:35.

eighteen major sites directly on the trail from Fable Valley to the western side of the plateau and it was later learned from residents of Blanding that such ruins were common over most of the plateau.

Utah V:4:6. This pueblo ruin was situated on a small knoll near the center of an extensive sage-covered flat. Although there were no standing walls, surface indications pointed to a large number of rectangular masonry rooms. Pottery and chipped material were thickly scattered over a wide area, 148 sherds being gathered within a few minutes. These included 36 plain gray, 58 corrugated, 48 black-on-white, and 4 orange ware. The decorated sherds were largely Mancos and McElmo Black-on-White, with a few sherds of Mesa Verde Black-on-White. Of the 4 orange ware sherds, 2 were Tusayan Polychrome, one may be Citadel Polychrome, and the 4th was too small to identify.

Utah V:4:7. About one-half mile to the west of the above-mentioned pueblo was another extensive pottery area. This may possibly represent a pit house village location, although the only surface indications were a few scattered slabs of rock. Of the 75 sherds picked up at this site, 11 were plain gray, 16 corrugated, 32 black-on-white, and 16 orange ware. Practically all of the black-on-white specimens were strongly suggestive of the Pueblo I Period. The 16 orange ware sherds appear to be Abajo Red-on-Orange.[17]

Utah V:4:16. Perhaps the best preserved example of a unit type pueblo on the plateau was one located on the eastern end of a long low ridge. This ridge today is thickly covered with a growth of western yellow pine and piñon. One twelve foot wide tier of rooms extending east and west for approximately seventy-five feet can be traced by the tops of the protruding rock walls, and there are indications of a number of other rooms to the south. Although there was no definite evidence of a kiva to the south, the heavy growth of vegetation prevented a thorough survey of that area. The thick matting of grass and pine needles covering the site also made discovery of potsherds a somewhat difficult task. However, 71 were eventually picked up, 18 of which were plain gray, 41 corrugated, and 12 black-on-white, the latter being Mancos or McElmo Black-on-White.

COTTONWOOD WASH

In addition to the above-mentioned sites, eleven others were visited in the vicinity of Blanding and along Cottonwood Wash to the west. These included one twenty-five room cliff pueblo with five circular kivas,[18] several small two- and

17 Brew, *Archaeology of Alkali Ridge*, pp. 259-271.

18 Tree-ring dates of 1243-44 AD were secured from this site; see Stallings, *Dates from Five Kiva House*, pp. 13-14.

three-room cliff pueblos, and a number of large mesa pueblos ranging from fifty to two hundred room structures. One of the largest of the latter was located a short distance northwest of Blanding and included a Great Kiva approximately forty feet in diameter with the remnants of what appeared to be a stone bench about the interior. Pottery at these sites was similar to that from the large pueblos in Beef Basin and Fable Valley.

CONCLUSIONS

The archaeological survey of the Beef Basin-Fable Valley-Dark Canyon Plateau areas, although covering only a very small section of the region, nevertheless revealed a wealth of prehistoric material. Including the Cottonwood Wash area, eighty-three archaeological sites were definitely located, and it is estimated that hundreds of others occur throughout the area. Small cliff dwellings, unit-type pueblos, and large open pueblos predominated.

Although the sites in this area are not in the San Juan drainage area but are across the divide in the main Colorado River drainage, it is evident that the prehistoric culture of this region is closely linked with that centering to the southeast around the Mesa Verde.[19] All evidence noted, including architectural features and associated pottery types, clearly indicated a direct relationship to the Mesa Verde culture. The only exceptions to this were a few trade wares, such as Tusayan and Citadel Polychromes, from the Kayenta area of the San Juan to the south. The presence of the single St Johns Polychrome sherd is also an indication of the widespread trade occurring at that time.

So far as could be determined, there were no sites or elements present in this area other than those of the Anasazi culture. Nothing was found to point to contact or relationship with the Fremont culture across the Colorado River to the northwest.[20] Petroglyphs were of the Basketmaker-Pueblo type and were unlike those occurring to the north in the so-called northern Periphery.

From dated pottery types it seems likely that this area was abandoned sometime during the thirteenth century, possibly either just before or at approximately the same time as the general abandonment of the Mesa Verde and Kayenta regions to the east and south, with the Ute and Paiute or other nomadic groups coming in at some later date.

The existence of circular and rectangular towers in this northwestern region is worthy of note, as is also the presence of three probable Great Kivas. Since

19 Reed, *Archaeological Work in Mancos Canyon*, and *Distinctive Features of the San Juan Anasazi Culture*.

20 Morss, *Ancient Culture of the Fremont*.

comparatively little is known about the archaeology of this area, more detailed investigation along the lines suggested by Brew[21] should be initiated as soon as possible.

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21 Brew, *Archaeology of Alkali Ridge*, p. 302.

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